

***United States Court of Appeals
for the Second Circuit***



TRANSCRIPT

APPEAL
75-6068

PETITION
75-4164

United States Court of Appeals
FOR THE SECOND CIRCUIT

SUN ENTERPRISES, LTD., SOUTHERN NEW YORK FISH AND GAME
ASSOCIATION, INC., LYMAN E. KIPP, RICHARD E. HOMAN, NO
BOTTOM MARSH and BROWN BROOK,

Plaintiffs-Appellants,

—against—

RUSSELL E. TRAIN, *et al.*

["Federal Defendants"], *Defendants-Appellees, and*

HERITAGE HILLS OF WESTCHESTER, *et al.*

["Private Defendants"],

Intervenors.

SUN ENTERPRISES, LTD., SOUTHERN NEW YORK FISH AND GAME
ASSOCIATION, INC., LYMAN E. KIPP, RICHARD E. HOMAN, NO
BOTTOM MARSH and BROWN BROOK,

Petitioners,

—against—

ADMINISTRATOR OF THE U. S. ENVIRONMENTAL
PROTECTION AGENCY, RUSSELL E. TRAIN,

Respondent, and

HERITAGE HILLS OF WESTCHESTER, *et al.*

Intervenors.

Appeal from the U. S. District Court for the Southern
District of New York

Petition to Review Order of U. S. Environmental
Protection Agency

TRANSCRIPT OF DEC Hearing, Volume 2 of 9

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THE STENOGRAPHIC RECORD

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter

of

the Application of HENRY PAPARAZZO and
CURTIS McGANN (HERITAGE HILLS) for the
acquisition of a source of water supply,
etc.

Water Supply Application No. 6284.

September 18, 1973
Town of Somers, New York

PAULINE E. WILLIMAN
THOMAS P. FOLEY
CERTIFIED SHORTHAND REPORTERS
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ALBANY, N. Y.

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter

of

the Application of HENRY PAPARAZZO and CURTIS McGANN (HERITAGE HILLS) for the acquisition of a source of water supply by the development of wells to ultimately supply 1.2 million gallons per day and the construction of a water supply and distribution system to provide service to a planned residential community consisting of approximately 3,000 living units known as Heritage Hills of Westchester County, for the construction of a dam approximately 20 feet high to create a pond having an area of approximately 1.6 acres on an unnamed tributary, known locally as Brown Brook, of the New Croton (Muscoot) Reservoir which is designated H-31-P-44-18 and which has been classified C(T), for the construction of a sewage effluent discharge structure, and for relocation of approximately 650 feet of the so-called Brown Brook to build a sewage treatment facility.

Water Supply Application No. 6284.

CONTINUED PROCEEDINGS had in the above-entitled matter at a hearing held by the New York State Department of Environmental Conservation at the Town Hall, Town of Somers, Westchester County, New York, on Tuesday, September 18th, 1973, commencing at 10:00 o'clock A.M.

PRESIDING: WILLIAM J. DICKERSON, JR.,
Hearing Officer.

APPEARANCES: (As heretofore noted.)

PAULINE E. WILLIMAN

CERTIFIED SHORTHAND REPORTERS

THOMAS P. FOLEY

I N D E X

158

<u>Witnesses:</u>	<u>Direct</u>	<u>Cross</u>	<u>Redirect</u>	<u>Recross</u>
Curtis McGann		162	207	
Walter McPhee	238	279		
Voir Dire of Mr. McPhee by Mr. Vazzana		247 265		

E X H I B I T S

	<u>For Id.</u>	<u>Evid.</u>
Ex. No. 3 - Map		266
Ex. No. 4 - Layout		266
Ex. No. 5 - Water Supply Report dated 3/73		270
Ex. No. 6 - Report of chemical analysis dated 11/3/72		270
Ex. No. 9 - Waste Water Report		257
Ex. No. 10 - Waste Water Report		257
Ex. No. 21 - Waste Water Facilities Report bearing date July 1973, etc.	247	257
Ex. No. 20 - "Statement of Qualifications of Walter McPhee"	240	241
Ex. No. 22 - "Comprehensive Master Plan"	291	
Ex. No. 23 - U.S.G.S. Map - Croton Falls Quadrangle		296

P R O C E E D I N G S

MR. DICKERSON: Mr. Florence, are you ready now?

MR. FLORENCE: Yes.

MR. DICKERSON: Ladies and gentlemen, this is a continuation of a hearing before the Department of Environmental Conservation in the matter of the application of Henry Paparazzo and Curtis McGann for a project known as Heritage Hills of Westchester. I think we went through the notice in detail yesterday as to the scope of the project.

I would emphasize again that the decision on the water supply will be based on the five legal requirements: Whether the plans are justified by public necessity, whether they provide for the proper construction, whether they provide for the proper protection of the supply or for the proper treatment, whether they are just and equitable to other municipalities affected and to the inhabitants thereof with particular consideration being given to their present and future necessities for water supply and whether they make fair and equitable provisions for the determination and payment of any and all

legal damages to persons and property which will result from the execution of the plans and also in dealing with the relocation of the stream, the construction of the sewage effluent structure and the dam, whether these plans would adversely affect the health, safety and welfare of the people of the state or the natural resources thereof. This is essentially what the determination will, in the long run, when we get done, be based on.

I'd like to just re-emphasize that at this time.

MR. FLORENCE: Mr. Dickerson, I'm not clear about one point in the hearing and maybe you could answer it to clear up my uncertainty. Will part of your hearing in this -- and is it part of the purpose of this hearing to locate this structure for the purpose of processing sewage?

MR. DICKERSON: The applications we have before us are for the construction of a dam --

MR. FLORENCE: Yes.

MR. DICKERSON: -- which I'm sure the engineers will bring out; for the relocation of a stream.

MR. FLORENCE: Yes.

MR. DICKERSON: I believe, although I'll have to wait for substantiation of this, that the purpose of this relocation was to construct a sewage plant. However, the application in its barest form is simply for the relocation of a classified stream and also for the construction of the outfall or effluent discharge structure in the classified stream.

Now, that's what we've got. Does that clear it up?

MR. FLORENCE: Somewhat.

MR. DICKERSON: I think you'll find the statute is very general on the determinations.

MR. FLORENCE: Seems to be.

MR. DICKERSON: On those stream protection points, they do affect the health, safety and welfare of the state or the natural resources thereof. The water supply statute is a little bit more specific.

As we broke yesterday, Mr. McGann was undergoing cross-examination and we will continue at that point with Mr. Florence.

CURTIS McGANN,

recalled as a witness for and in behalf of the applicant, having been previously duly sworn, was examined further and testified as follows:

CROSS-EXAMINATION (Continuing)

BY MR. FLORENCE:

Q. Mr. McGann, just in brief summary to try to resolve all of the questions yesterday and to bring us back to it, is it a fair comment in summary to say that this application is a personal application; however, the execution of the plans proposed in this application will be by corporate entity at some future date?

A. I suppose that's a fair summation. I think it's impossible, however, to summarize in any -- accurately in any short statement of that nature.

Q. Would it be more accurate for me to say that you have a lot of options open at this point in time and there's no fixed specific intention or course of conduct to take place?

A. No, I don't think that's an accurate statement.

I think the --

Q. Could you modify it to make it more accurate, please?

A. Well, basically, this project is owned by Henry

Paparazzo and myself in partnership. The partnership name is Heritage Hills of Westchester. Our corporate organization which develops and constructs and manages not only this project but Heritage Village and other projects as well, is the entity which will develop, manage and construct this project.

Now, there are and were requirements imposed beyond our control which we have had to comply with, but the structure is disciplined. It's essentially --

Q. I didn't mean to take you away and I'm sorry to interrupt but my question specifically relates to this application as it relates to a sewage district or -- and a water supply district. Would you direct your answer in that respect?

A. Well, we are -- we've been required to form these districts and we have taken whatever steps we have been able to take to the extent we could take them to do so. All of the project resources, however, will be available not only to construct and operate but sustain and pay whatever damages, if any, ever develop that might result, notwithstanding the separate corporate entities under the Transportation Act or

whatever. We cannot, of course, jeopardize the project by exposing it to threats by any particular element of the project. If there were damages sustained by someone or injuries sustained, we have to pay and we will pay and we have the resources with which to pay.

Q. All of these are intentions to do a future act as you deem it appropriate; wouldn't that be also correct?

A. No, I don't think it would be correct.

Q. Well, for example --

A. We have an absolute obligation and it will be fulfilled and I don't think we have any discretion whatever.

Q. That's a present intention to do something in the future, would you say? You intend --

A. It's a present intention to do something in the present as well as the future, yes.

Q. O.K. Fine. Now, with respect to the application, I'll just ask some general questions and finish this up if I can, Mr. McGann, without torturing it. Do you have any specific information other than the fact that you have hired experts to give you certain information about the land you own?

A. Do I --

Q. -- have any specific information about its topography, its terrain?

A. I am probably --

Q. As it relates to this application?

A. I do not and I probably am the least valuable witness that will appear before this hearing.

Q. Are you personally familiar with the terrain itself?

A. To a very limited extent, yes.

Q. How many streams are there on the terrain?

A. I don't know.

Q. If you know.

A. I don't know that I can even answer that. I know of the stream called Brown Brook. I believe there are possibly other streams traversing the property on the west side of the project, but I'm not certain of that.

Q. Are you familiar with any on the east?

A. Other than Brown's Brook?

Q. Yes, I refer to the east as this portion from the Town House toward the Stone House?

A. No, I'm not familiar. That doesn't mean there are not streams there; I just don't know about them.

Q. Could you summarize what fair and equitable provisions for the determination and payment of any and all legal damages to persons and property you have provided presently as it relates -- as those things would relate to the hearing here, that is, your application?

A. We've provided insurance protection to the extent that we've been able at this point. Obviously, without the corporation's sewer works and water works corporations being implemented, they're not a part of it. They will be made a part of it and I represent that they will be.

Q. That would be again future and present intention, present and future actions?

A. Present and future but it's more than that. I represent it and I stand by that representation. In addition, the resources of the project, there is a line of credit of \$18½ million which will be applied to the construction and development of this development.

Q. That's really not applicable to damages?

A. It really is applicable to damages because all of those resources would be available or to whatever

extent they were available would be applied to the remedy and correction of any damages.

Q. Doesn't that, the terms of that building loan which have been introduced into evidence, indicate that if such an event should occur that that would, in fact, be an act of foreclosure or permitting foreclosure?

A. Not necessarily, no. If somebody were injured, let's -- on the project, obviously they would be compensated for that injury out of due court process or settlement.

Q. That building loan is really contingent on your doing a series of acts in the future as well as the things you've already done to qualify to get this loan; isn't that correct? In other words, it will require future conduct on your part, specific acts?

A. There are undertakings and obligations of the developer that must be fulfilled.

Q. And in the event that they -- that some act should either inadvertently or for whatever reason, maybe even beyond your control, that matter could be foreclosed and this line of credit cut off to you or to your associates?

A. That's one possibility among several thousand,

I'm sure.

Q. Yes. Now, what about --

A. Conjecture.

Q. -- the insurance contract or the binder or the certificate of insurance that was introduced into evidence; for what period of time is that insurance valid, are you familiar?

A. It's probably a standard three-year policy. I don't -- I am not too familiar but I assume that it's a three-year term.

Q. What provisions have you made beyond that, if any?

A. Of course, we'll renew it. Most of these contracts of that nature are normally written for a term of three years and are rewritten after the expiration.

Q. Would it be fair for me to say that you don't have any specific information as to the proper and safe construction of all the work that is connected with this application?

A. Well, I certainly don't have any of the best evidence of this nature in that direction. We have engineers here and their purpose is to testify on the details of the program.

Q. Would it be fair to say that you don't have any

specific or detailed or expert information about the construction of a sewage effluent discharge structure as it relates to this application?

A. That -- that would be fair to state.

Q. All right. Are you familiar with the one which is presently in operation in your -- in the area that you referred to earlier in your testimony, the Southbury operation?

A. Am I familiar --

Q. Yes.

A. -- with the details of it?

Q. Yes.

A. No.

Q. Do you know what kind of a plant it is and where it discharges?

A. Only generally. The only thing I really know about it is that my office overlooks it. Very nice view too.

Q. Do you have any specific and expert information about the relocation of approximately 650 feet of the Brown Brook for the purpose -- in order to build this sewage treatment facility?

A. No, I -- I haven't any specific knowledge of it.

Q. Did you participate within your organization with any -- in any discussion or plans for the placement of that facility?

A. I didn't participate, no. I'm -- I believe the facility, the placement of the facility is pretty much as indicated from the very start and on the Comprehensive Master Plan. I believe the stream is shown traversing that utilities area.

Q. Would it be fair to say that you were aware of the location and the placement or the tentative placement of that from the beginning?

A. To that extent, I have been aware, yes.

Q. My reference being to this sewage discharge facility.

A. Oh, wait a minute. You mean the --

Q. Sewage plant.

A. The plant, yes.

Q. We've got euphemisms here, talking about a sewage plant. Now, the location, do you have any expert or specific information about the source of the water supply; that is, the means, the location? Did you take part in any planning of that?

A. No, I didn't directly take part in any of this

planning. However, we do have specialists here who are fully prepared to testify in some depth on all of those details.

Q. In view of your answers, I presume that to be the case. Would that be fair for me to say then that you don't have any specific or expert information about the water supply; that is, its source?

A. That is correct.

Q. Its purity, its availability, location?

A. This information has been exposed to me and I have some lay knowledge of it but I don't think it would be worth the time taken to ask me questions when you can get much better information from --

Q. Have you made any -- you filed an undertaking with the State of New York. That undertaking deals specifically simply with the cost of this hearing and for no other reason, isn't that correct, Mr. McGann?

A. I guess so. You'd agree with that, would you not?

MR. BLASI: That's the only requirement of the statute, a \$2,000 undertaking which has been filed and I think it has been marked for

identification.

MR. FLORENCE: There are no other undertakings for faithful performance?

MR. BLASI: Not at this moment, not at this moment.

MR. FLORENCE: All right, we could so stipulate to that, could we not?

MR. BLASI: No, I will refer you to Section 119 of the Transportation Corporation Law which sets forth specifically the guarantees required so I cannot stipulate to anything and I ask the Hearing Examiner to take judicial notice as he will do, of Section 119 of the Transportation Corporations Law insofar as it relates to the sewage disposal plant, the construction, the operation at the completion. It states -- I don't want to read the whole section, I just want to make the point -- "the local governing body shall require the posting of a performance bond for the completion of the construction of the sewage works system, may require the posting of an additional bond or other guarantee for the payment of labor and materials furnished in the course of such construction and for the cost of

retained engineering services to the local governing body or sewer agency."

In addition, Section 2 of the local governing --

MR. FLORENCE: Good thing you're not reading it.

MR. BLASI: No, I'm trying to summarize it. It's quite long. The guarantees that are required are very stringent.

MR. FLORENCE: Does that relate to the answer that Mr. McGann was requested?

MR. BLASI: No, it relates to me asking you to stipulate and I'm putting in the record why I cannot stipulate. Now, you've asked me to stipulate and I have to answer the question.

MR. FLORENCE: Yes or no.

MR. BLASI: No, I cannot answer it yes or no.

MR. FLORENCE: I would object to any further reading.

MR. BLASI: Let me just finish what I have to say if you will.

MR. FLORENCE: O.K.

MR. BLASI: I'm not trying to be unreasonable. I just have to answer this because you've asked me a question of law. "The local governing body shall require a reasonable guarantee from the corporation that said corporation will continue to maintain and operate the system for a period of at least five years in the form of a bond or other security acceptable to the local governing body in the amount of the estimated cost of the operation and maintenance of the sewage works project less the estimated revenues which are received from properties served and to be utilized to defray such operation and maintenance costs as reported by the Licensed Professional Engineer or consulting engineering firm to the local governing body. The local governing body may, and on petition to the corporation shall, at any time review the adequacy of such bond or other security to ascertain whether it should be modified on the basis of physical performance or other conditions.

"Three. In addition to the guarantee, the stock of the corporation shall be placed in escrow and title thereto shall pass to the local

governing body in the event of failure to complete the construction thereof or in the event of abandonment or discontinuance of the maintenance and operation of the system by the corporation."

MR. FLORENCE: I presume you've done all of these things pursuant to that regulation?

MR. BLASI: Let me just say this to you: --

MR. FLORENCE: Can we stipulate to that, that you have obeyed that part of the law?

MR. BLASI: No, we will stipulate that we must and will.

MR. FLORENCE: Some time in the future.

MR. BLASI: As soon -- this is one of the reasons that the City of New York has filed an objection here. It isn't really an objection. It's a statement that they cannot approve this sewage disposal plant until we do comply with Section 119, if I understand the objection which is before Mr. Dickerson.

MR. FLORENCE: In other words, you haven't yet complied with the provisions of the law?

MR. BLASI: Until we get through

with the blessing of the Department of Environmental Conservation we can do nothing, Mr. Florence. This is so preliminary, we can do nothing. We have done our work. We have tried to comply with it but until we get past these hearings, we can do nothing.

MR. FLORENCE: Would you be --

MR. BLASI: I haven't even finished what else they have.

MR. FLORENCE: Are there more requirements that you have yet to perform for the town or other municipalities and subdivisions of the State of New York?

MR. BLASI: There are more requirements. "The local governing body may at the time of granting of consent to incorporation, grant an option to purchase." It may exercise the option. Now, a water district is formed; a sewer district has been formed. You must read the Town Law provisions in connection with this and under the Town Law provisions Section 189 must be read in connection with these. The control of the sewage disposal plant as to costs and other provisions is under the Town Board of the Town of Somers so not only do we

control the operation, the construction and the building under the Transportation Corporation Law but they also have the right to tell us how much to charge so I don't know, I mean if you're asking this gentleman of his future intentions, I'm going to tell him he has to comply with it whether he intends to or doesn't intend to. I say nothing further on this point.

MR. DICKERSON: For the record, I will take judicial notice of Section 119 of the Transportation Corporation Law and to clear up two matters from yesterday, Article 12 of the Transportation Corporation Law and Article 11 of the Public Health Law.

MR. BLASI: And Article 12 of the Town Law, Mr. Commissioner.

MR. DICKERSON: O.K., and also Article 12 of the Town Law.

MR. BLASI: Yes, sir.

BY MR. FLORENCE:

Q. Would it be fair to say then that since you have had the permission to form the district, the sewage district, from the town you have not, in fact,

bonded nor have you, in fact, put the stock in escrow which the town --

A. We will accomplish all of these things before a building permit is issued and when we get to a point when a building permit would be entertained.

Q. Would I understand that to say you agree with me?

A. Yes, I suppose so in a different mode of expression.

Q. All right. Now, in relation to the consent of the City of New York, do I understand that you have not as yet received that consent to construct a sewage discharge -- a sewage plant? I don't know.

A. I can't -- I can't tell you in any detail exactly where our matters stand with the City other than very generally. I think Mr. McPhee can give evidence on that.

Q. To your best knowledge, you have not received that consent?

A. I don't believe -- I don't believe it's been formalized, let me put it that way, but I shouldn't really even comment on it.

Q. To this date, there is no consent as you would expect to have or in your experience in the past

have received ultimately, for the construction of a sewage plant?

A. Once again I've got to defer to somebody like Walter McPhee. If you ask those questions of him, he can give you very specific answers.

Q. Would it not be true that in the event that they -- that the City of New York should indicate to you their dissatisfaction with this plant, that you would require a new hearing should they require the placement of it in another location?

A. I don't -- I don't know.

MR. BLASI: I object to the question because it calls for a conclusion of law. I think that's up to you, Mr. Dickerson.

MR. DICKERSON: Sustained.

MR. FLORENCE: Just pointing out a little thing or two. I haven't any further questions at this time. Thank you, Mr. McGann.

MR. DICKERSON: Thank you, Mr. Florence.

Mr. Vazzana indicated he had a couple of questions. If there's no objection from the other parties, I'll let him get his questions in

and then we'll run through the rest of the parties.

MR. BLASI: No objection, Your Honor.

Mr. Dickerson, is it all right if I don't stand when I make objections, not to him.

MR. DICKERSON: Please, as I indicated yesterday, a more relaxed atmosphere seems to be prevailing today. If you want to take your coats off or make yourselves quietly comfortable, please feel free.

MR. BLASI: Thank you very much.

MR. DICKERSON: We are trying to get at the facts of the situation and we shall do so to the best of our ability, but there's no reason for being uncomfortable in doing it.

CROSS-EXAMINATION
BY MR. VAZZANA:

Q. Mr. McGann, you said that this would be -- this development is a condominium development, is that right?

A. Yes, sir.

Q. That's composed of the dwelling units, is that right?

A. Yes, sir.

Q. And you further testified that -- sorry -- that the

sewage disposal unit and the water works were not a part of the condominium, is that right?

A. That's correct.

Q. They were going to be operated under a separate corporation, under two separate corporations?

A. Yes, sir.

Q. Is that right?

A. Yes, sir.

Q. And this application which you have made relates to the sewage disposal unit as well as the water supply for this area, is that right, by the corporation?

MR. BLASI: Mr. Vazzana, I don't wish to object, but I think for the purpose of clarity, the application is a water application to take water. The Department of Environmental Conservation included a hearing as part of the hearing on the question of the waste water facilities. Now, am I -- if I'm wrong on that --

MR. DICKERSON: Well, I'm going to split hairs even further. We are hearing today the entire water system.

MR. BLASI: Right.

MR. DICKERSON: The application for the construction of a dam.

MR. BLASI: Right.

MR. DICKERSON: And the application for disturbance of a classified stream.

MR. BLASI: Right.

MR. DICKERSON: Said disturbances being of two items, one the construction of the sewage effluent discharge structure outfall or whatever you want to refer to it.

MR. BLASI: Right, sir.

MR. DICKERSON: And the relocation of the stream.

MR. BLASI: Right, sir.

MR. DICKERSON: For a distance of approximately 650 feet. Now, the purpose of the relocation has been implied and I think we might as well get it clear now. I believe it is for the construction of the sewage plant, is that correct?

MR. BLASI: It is an incident of it.

MR. DICKERSON: Right. But the application and the matter before us at this moment was the relocation of the stream and the construction

of the discharge structure.

MR. BLASI: Right, sir.

MR. DICKERSON: There have been new statutory provisions taking effect the first of September involving sewage effluent discharges. These matters are still to be determined in the future.

MR. BLASI: I didn't want to confuse it. I just wanted to pinpoint it.

MR. VAZZANA: May I have an answer to the question? May I have an answer to the question?

THE WITNESS: Would you repeat the question?

MR. VAZZANA: Would you repeat the question?

(The pending question was read by the reporter.)

THE WITNESS: I'd like to stand on the comments made by Mr. Dickerson and Mr. Blasi. I guess it does not directly relate to the sewerage treatment plant except in the peripheral sense that as an incident, as Mr. Blasi said, in the construction of that plant the stream has to be relocated.

I'm not sure that's a very good answer.

Q. Now, I ask in your application, your application was made by Henry Paparazzo and Curtis McGann, is that right?

A. Yes, sir, I believe so.

Q. It was not made in behalf of the corporation or at least was not made by these two corporations?

A. It was not made by the corporations, that is correct.

Q. And these --

MR. BLASI: Mr. Vazzana, I don't like to disagree with you again but there was a supplement to it again received by the Department of Environmental Conservation. It was noted by the water corporation with the consent of the Town Board and the Department of Health and that's part of the record and part of the application.

MR. VAZZANA: Yes, I understand but the question still is applicable.

Q. Can you answer the question or do you want it re-read?

A. I think I did. I don't recall the question though, in fact.

(The pending question was read by the reporter.)

THE WITNESS: I think I said it was not -- I don't believe the corporations were in existence at that time.

MR. BLASI: No.

Q. They are in existence today, are they not?

A. I believe one of them is and all of the preliminaries for the other are, is that correct?

MR. BLASI: If Mr. Vazzana would allow me to interject, I mean I don't want -- the water works corporation has been formed, the sewer works or sewage works corporation cannot be formed until the various consents required by the law are obtained.

Q. But the water works corporation has been formed?

MR. BLASI: That is the only corporation in existence today and the certificate was a part of this record, a certified copy of it.

MR. VAZZANA: That is correct.

Q. But they are not part of this application?

A. No, sir, I don't believe they are.

Q. Although they are a separate entity from the --

A. They are or will be.

Q. Or will be a separate entity?

A. A separate entity, yes.

Q. And the unit owners will have little control over that corporation, is that right?

A. Well, the services are to serve these unit owners principally and to the extent that service is inadequate or there is any criticism, I can assure you that the unit owners certainly do have voice and recourse but --

Q. I'm speaking about --

A. -- direct management control, no.

Q. I'm speaking about the direct management.

A. No.

Q. Now, that direct management will be by whom?

A. The management will be effectively by Heritage Development Group, Inc.

Q. Now, Heritage Development Group, Inc. has made no such application, is that right?

A. Heritage Development, Inc. has not made an application, no.

Q. And it's not included, and I hand you this paper which I believe is a copy of an exhibit. I'm

speaking about notice -- notice of hearing, is that what it says?

A. Yes, or public notice.

Q. Yes, sir. That is not included within that notice, is that right?

A. No, it isn't, right.

Q. It's not included among the petition?

A. No, it isn't.

Q. Which is exhibit --

MR. DICKERSON: The petition stands

on its own two feet, it speaks for itself.

Q. It's not?

A. No.

Q. Now, Mr. McGann, this corporation that we speak of is a stock corporation, is it not?

A. Yes, it is.

Q. Who will be the stockholders of this corporation, if you know?

A. They are. They are Henry Paparazzo and myself.

Q. There will be -- you two will be the only stockholders?

A. We are presently the only stockholders.

Q. And it's a stock corporation, is that right?

A. Yes, it is.

Q. And stock is subject to transfer, is it not?

A. Stock is always alienable unless it's restricted in some way. There is no restriction on this stock.

Q. So for the moment --

A. Oh, as to the Transportation Corporation, you mean? I had forgotten which corporation you're talking about.

Q. I'm talking about the water corporation.

A. Oh. Whatever is required by law as to that corporation, and I don't know what is required by law. I defer to learned counsel.

Q. Well, I -- I might say this: The law in Connecticut is no different than the law in New York so you can rely upon the law of a sister state.

A. No, it is -- it's quite different as far as these two --

Q. These two.

A.-- are concerned.

Q. So that once this corporation is in existence, in other words, it can be alienated?

A. Yes.

Q. That stock can be transferred or sold to somebody

else?

A. Yes, it can, right.

Q. Now, you're a lawyer, is that right?

A. Yes, sir.

Q. You're a member of a firm?

A. Yes, sir, I'm a partner in the firm of Sturges and Mathes.

Q. And where are they located?

A. They're located in Southbury, Connecticut and Woodbury and Waterbury.

Q. You have, of course, no experience in the management of a sewage or water disposal plant, is that right?

A. No, sir, that is not right. I do.

Q. You do?

A. Yes.

Q. You tell us what your experience is?

A. Well, I've handled from both a legal capacity, I suppose, and a management -- and from a management point of view the Heritage Village water system in particular which is a franchised system serving not only Heritage Village but the entire Towns of Southbury and Middlebury and it has evolved upon me for some reason to handle to some extent even on an

operational basis from a management point of view that system.

Q. You mean the administrative --

A. The administrative --

Q. -- functions, is that right?

A. Yes, sir.

Q. Now, Mr. Paparazzo, what experience does he have?

A. Well, he has far more than I in the sense of having overall operational management control of these systems.

Q. Now, what is -- do you know Mr. Paparazzo's business?

A. Do I know his business?

Q. Yes, what is he engaged in at this moment?

A. He's President of the Heritage Development Group and he's engaged in management of Heritage Development Group and the various projects which are being developed and constructed and managed by that group.

Q. In other words, he's a developer?

A. He's a developer, that's correct.

Q. Now, you spoke of the Heritage Hills, what did you call it, Heritage Hills Group, Incorporated?

A. No.

Q. Did you make mention of that?

A. Heritage Development Group.

Q. That's correct.

A. What --

Q. Or words to that effect. I mean --

A. What's -- I missed the thrust of your question, sir.

Q. You referred in your testimony to a Heritage Hills Group, Incorporated?

A. No, Heritage Development Group, Incorporated.

Q. Group, Incorporated?

A. Yes.

Q. What is that?

A. It's a management corporation which -- the purpose of which is to manage and develop projects principally of the nature of Heritage Hills of Westchester. It is the developer and manager of Heritage Village in Southbury, a project in Milford and one in Simsbury, Connecticut.

Q. And when you speak of the management, what you're speaking about is the managing of the physical properties, is that right, buildings?

A. No, I think it's broader than that.

Q. Taking care of --

A. There's quite a few people employed. I'm not really competent to give you the number, but we have a very extensive accounting department. We have in-house computers. We have a marketing, sales and marketing division. We have a public relations division. We have a construction division. We have an architectural and engineering division and they basically manage all of the factors and the many factors that go into the development of a project of the complexity and nature of Heritage Hills.

Q. Yes, and I believe there has been some statement by Mr. Blasi or by you that you have not filed with the Attorney General, is that correct?

A. That -- that is correct, yes.

Q. Yes.

A. We are, however, in the process of putting together all of the necessary information to do so. We've had, through counsel in New York, we have had preliminary discussions and views of the proposals here and they're quite familiar with the program and what was -- what will be forthcoming by way of filing.

Q. And eventually a declaration will be filed with the County Clerk, is that right?

A. That is correct, before any units are sold or before the first unit is sold, there will be a filing.

Q. And with that filing there will be bylaws, is that right?

A. That is correct, sir.

Q. Do you have copies of the bylaws?

A. We have drafts of all of the paper work. I don't have them with me.

Q. Now, isn't it a fact, and I'm referring to your drafts --

A. Yes, sir.

Q. Now, you might put out --

A. Yes, sir.

Q. I am asking to see these drafts, and do the drafts of the bylaws include or have you included in these bylaws that the consent of the unit owners is required before the management group may function?

MR. BLASI: Mr. Examiner, may I ask counsel the relevancy of this line of questioning? We've -- I don't wish to be obdurate or appear

objectionable but Mr. McGann has testified that no opportunity has been offered, no sale of any unit has been made and that nothing will be done until the requirements of the Real Property Law are complied with. Now, that's a matter of marketing and a matter of observing the law of the State of New York with reference to the filing of a condominium declaration or observing all the requirements of the Real Property Law. Now, the use, the sale, the occupancy -- perhaps the occupancy, but this particular line of questioning I don't see where it has anything to do with this application before DEC.

MR. VAZZANA: Mr. Dickerson, it refers to the operation of this unit, who will operate it and also the management now, because Mr. McGann spoke about managing.

MR. DICKERSON: I'll let him answer the question, this question, whether the proposed draft has any required consent of the unit owners for the management group to function. A yes or no would appear to suffice.

THE WITNESS: Yes.

MR. DICKERSON: O.K.

Q. So if you do not receive the approval of the management, of the unit owners, then a management group may not function, isn't that so?

A. No, I -- maybe I've misled you possibly because I didn't understand your question. There will be initially management control of the condominium, of each condominium association.

Q. At its inception?

A. At its inception. Now, that is simply to develop a cohesiveness because we have a number of condominiums that will be developed and to develop a professional organization within this community of condominiums which will manage the many aspects of the development. That will be controlled by unit owners ultimately. The only -- our only purpose in taking the front end management is to insure that there's no fractionalization and that there's a discipline as the project moves toward its completion. This was our program in Southbury and it's our intended program here at Heritage Hills. However, all management of all condominium associations will be under the control of the unit owners ultimately.

Q. Are you familiar with management organizations generally?

A. I -- I have to say generally yes.

Q. I'm speaking about Stephens-Garris-Brown which, of course, is one of the largest?

A. Yes.

Q. In other words, what you're talking about when you speak of management group, you're speaking about groups similar to them?

A. Well, I'm -- I guess so. I am not familiar with that particular organization but I'm talking about people who will undertake to discharge the responsibility of maintaining the exteriors of homes, maintaining grounds.

Q. And get paid for it?

A. Yeah, they might get -- they probably do get paid for 't if they're under an independent contract.

Q. You will get paid for it, your organization?

A. Oh, we will --

Q. Yes.

A. -- we will be compensated for our expense.

Q. For running the organization?

A. If they so desire.

Q. You won't do it free of charge?

A. We will do it at cost initially and with great subsidy and we have to contribute very substantial subsidies at the front of these projects to the various things.

Q. That is, that would be natural at the beginning?

A. Yes.

Q. Because of the fact that the units are not in full operation or at least not until they're sold?

A. Let me explain if I may that our philosophy, and I think we're quite consistent in this respect, is to make profit on the sale of housing and we have very rigidly adhered to that. There are certain exceptions, obviously, hopefully because we have to retain ownership of things such as utility systems. Hopefully, they'll make some small profit but they're so tightly regulated, at least my experience in Connecticut has been to this effect, that there's very little hope of making very much profit. They certainly would not stand on their own two feet in today's market if that were the only purpose.

Q. Now, just to refresh my own recollection, how many units do you contemplate, 3,100, is that right?

A. Yes, sir.

Q. Now, the -- what will be the expense of putting up these -- these units, if you know?

A. Well, we have -- we have very elaborate economic models that I'd have to refer to to give you any kind of reliable information. I -- I would have to defer until I had that information in front of me. I can't --

Q. Can you give me an approximation?

A. Of the total project cost, all of the costs?

Q. No, the -- no, just take the units themselves without taking into consideration the other, the utilities.

A. Perhaps \$150 million for units alone, I don't know.

Q. \$150 million?

A. \$125 million, I don't know. I'd have to refer, in the aggregate.

Q. In the aggregate?

A. It would probably -- I don't know, I'm guessing and I'd have to refer to models on that. We don't break it down on an aggregate.

MR. BLASI: How is this relevant?

The costs will go up tomorrow as soon as the government lifts Phase V.

MR. VAZZANA: All right.

MR. BIASI: I mean if I could know what your point is, I'd have no objection to his answering.

MR. VAZZANA: If you listen to the next question, you probably may get the point.

Q. You say \$150 million, is that right?

A. Well --

Q. Or approximately.

A. Give or take \$50 million one way or another.

Q. Let's take \$50,000 off of that.

A. Take 500.

Q. \$150,000, is that right?

A. Yes.

Q. Your building loan is \$16 million, isn't it?

A. No, 18½.

Q. 18½. There's a great wide disparity between the building loan and the cost.

A. No, there really isn't. That building loan is keyed to very elaborate and extensive economic models. Heritage Village, for instance -- let me

state this, that the entire lending structure here at Heritage Hills was actually put together by the very same people that put together the lending program for Heritage Village in 1966 and who lived with Heritage Village and the refinement of that program over the years. These are bankers. They're not within our organization. We're talking about a line of credit. We're not talking about a construction mortgage loan in the normal sense. The \$18½ million will consistently roll under the blanket of the mortgage as the project develops.

Q. I see.

A. All proceeds from the sales of units are plugged back into the project. They're not paid back to the bank so that that \$18½ million in all probability will be more than sufficient to prosecute the project to completion.

Q. To completion; did you say to completion?

A. Yes.

Q. Now, you say to completion. What you mean is that the \$18½ million will carry you over until the various sales are made?

A. Yes.

Q. And then from that point on you'll be using that money for other projects?

A. Those proceeds -- the \$18½ million will not be paid back until the end of the project and all proceeds developed from the sale of units.--

Q. Will go into the --

A. -- will be applied to the project.

Q. M-m h-m-m.

A. And that's how it works in Heritage Village.

Q. Now, in building these utility units, I'm speaking about these within the corporations, what portion of that \$18 million will be used, \$18½ million?

A. I think Mr. McPhee can testify to some extent on the costs. I would assume that initially the -- obviously the cores of these systems will be built out of those proceeds.

Q. In other words, you're going to build these units and as these units are being built, you will be receiving revenue and you will use that revenue for these utilities, is that right?

A. It is correct to a certain extent. The basic utilities will be built at -- right on the front end. The sewerage treatment plant will be built out of

those funds.

Q. Out of the 16 million?

MR. BLASI: 18½.

A. 18½, right.

Q. Half a million, it's only a number.

A. And so will the basic water system. Now, the only parts of that system that probably will be built out of revenues or proceeds developed from the sale of units will be ultimately mains and laterals and things of that nature rather than the systems themselves.

Q. But basically the apportioning of that money is going to be used for the -- initially for the building of these services, is that right?

A. Yes.

Q. So that you will have at the time of the commencement of the major construction -- and I'm speaking about major construction, I'm not speaking about these 18 units which --

A. No.

Q. -- which may be -- when the revenue will be coming out of that particular unit, is that correct?

A. Yes, it will develop revenue.

Q. But just to recapitulate, the application is not made in behalf of these corporations, is it, or this corporation?

A. No, sir.

MR. BLASI: Mr. Examiner, I don't wish to interpose an objection to that question. I think the record before your body speaks for itself. There was a petition filed; there was a consent of H & H Land Corporation. There was a notification of the consent of the Town Board for the formation of the water district. There was a notification of the formation of the water works corporation. We're dealing with utilities which are controlled under the Transportation Corporations Law.

MR. VAZZANA: This is a separate corporation, sir.

MR. DICKERSON: I recognize that.

MR. BLASI: We have to have it.

MR. DICKERSON: I recognize that.

MR. VAZZANA: You recognize that.

All right; with that recognition, I will --

MR. BLASI: Now, Mr. Examiner, Mr. Dickerson, I just wish to have you, or to place in

the record at the request of the applicant, that you take judicial notice of Article 4 of the Transportation Corporations Law relating to water works corporations and the requirements of those sections and also to the sections of the Public Service Law if I can find my memorandum, Section 198 et seq. And the subdivisions of it.

MR. DICKERSON: I will take --

MR. FLORENCE: May I ask just three questions based on what the redirect was and it won't take a whole minut to ask and answer them, I'm sure.

MR. DICKERSON: O.K.

BY MR. FLORENCE:

Q. I understand that you had some experience, Mr. McGann, in the operation of a sewage district and the management of a sewage plant within that district?

A. Not really. The sewerage -- I directed -- my efforts have been basically in the water system.

Q. How many -- how many residences are served?

A. By the water system?

Q. Sewerage district.

A. It's not a district. Are you talking about our water system?

Q. Well, I was referring specifically to the sewage but I'll take an answer both or either way.

A. We probably serve at this point in excess of 2,000 units plus a major industrial complex in Middlebury, Connecticut and many residences in Middlebury and Southbury.

Q. The water district and the area served by the sewage treatment have the same boundary lines?

A. No.

Q. They're different. The sewage is smaller?

A. Yes, much smaller.

Q. Do you know what type of plant you have?

A. Yes, it's a --

Q. Please tell me.

A. It's basically, I believe, an extended aeration plant.

Q. And where is the location of discharge of the treated effluent?

A. I don't know exactly. It's in the Pamperaug River, but I don't know exactly the location.

Q. How close is it to your nearest boundaries, the

point of actual discharge?

A. It's probably at our boundary. If -- I have a general idea of where it is and if I am correct, the boundary line is the point of discharge and the Pamperaug River, the fee title in that area runs to the centerline of the river.

Q. And the pipe actually traverses or goes down the river a period of several hundred feet, does it not, before the discharge from where it enters the river, or do you know that?

A. I don't -- I don't know it. I don't think it does.

MR. FLORENCE: I have no further questions.

MR. DICKERSON: Mr. Blasi, I will take judicial notice of Article 4 of the Transportation Corporation Law, Section 198 and following of the Public Service Law. I can see I'll be doing a lot of reading.

MR. BLASI: Just one point I want to clarify if I may, on -- asking Mr. McGann just one or two questions because I think there's a little confusion on one point.

REDIRECT EXAMINATION
BY MR. BLASI:

Q. Mr. McGann, you have testified to these two corporations. One is the water works corporation which has been formed and the other is the sewerage works corporation which awaits further approvals, correct?

A. Yes.

Q. Those corporations, will they operate as separate utilities, separate and apart and managed in accordance with the requirements of the Transportation Corporation Law and other sections?

MR. FLORENCE: I think, Your Honor--

MR. VAZZANA: Your Honor, I think
this --

MR. FLORENCE: -- this is an administrative hearing. I'd simply point out that the question in a court of law would be irregular, at least I would submit that it would, and that what we have here, first of all it's leading, shedding and improper.

MR. BLASI: Not leading, but I'll
withdraw it and reframe it.

MR. FLORENCE: Thank you.

MR. BLASI: All right.

MR. FLORENCE: And a few other objections I'll withhold until later.

MR. BLASI: No doubt.

BY MR. BLASI:

Q. Mr. McGann, you testified that you and Mr. Paparazzo were to be the shareholders of these two corporations, is that correct?

A. Yes.

Q. And you would be the officers of these corporations?

A. Yes.

Q. And the management of those corporations would be within that corporation or who would manage those corporations?

A. We would, Henry Paparazzo and myself.

MR. BLASI: No further questions.

MR. FLORENCE: I would respectfully object to the line of questioning which -- in which the questions are dated as to require answers for a future -- for a present intention to do a future act. In point of fact --

MR. DICKERSON: I'll just note your objection and let it go at that.

MR. FLORENCE: In point of fact, Mr. McGann, wouldn't it be possible that somebody as scurrilous as myself could come in and offer you an appropriate amount of money and you would at this time -- \$100 million for what's out there right now, and you can change your present intention to do a future act by transferring at this time to --

MR. BLASI: I object to the question because Mr. Florence is not scurrilous and, secondly, I think it calls for a conclusion.

MR. FLORENCE: Just pointing out if I may, Mr. Blasi, that it is a present intention called for.

MR. BLASI: I agree with you it's a present intention.

MR. FLORENCE: And a present intention is conjectural and there's always a possibility --

MR. DICKERSON: I think we'll take notice of the objection and let the matter drop. Apparently when quality meets, compliments fly. We'll press on with the cross-examination.

Mr. Weber, do you have any questions?

MR. WEBER: Not at this time.

MR. DICKERSON: Mrs. Saia, do you have any questions of Mr. McGann at this time or do you want to get at the engineer for the technical part?

MRS. SAIA: Yes.

MR. DICKERSON: Is Dr. Pratt or Dr. Port here yet? No? I'll reserve his rights because he said he had another engagement this morning.

Mr. Walters, or any representative from the City of New York?

MR. SPYROPOULOS: Mr. Walters is not here today. We'll reserve the right to question at a later date.

MR. DICKERSON: Right, and your name?

MR. SPYROPOULOS: Spyropoulos.

MR. DICKERSON: Mr. Weber, anything for the Health Department?

MR. WEBER: Mr. Dickerson, I'd like to note the appearance of the Office of the County Attorney at this time and would prefer to defer anything from the Health Department if I may at this time.

MR. DICKERSON: The County Attorney?

MR. ALEXANDER: Yes.

MR. DICKERSON: Your name, please?

MR. ALEXANDER: The name is F.

Sherwood Alexander, Senior Assistant County Attorney.

MR. DICKERSON: Mr. Alexander, you're aware that your county health representative is wearing at least two hats that I know of and possibly more. He's also representing the State Health Department today.

MR. ALEXANDER: I realize that. I haven't had a chance to confer with him but I understand that's so.

MR. DICKERSON: I'm just warning you, you'll have to figure out under which hat he speaks.

MR. ALEXANDER: Surely.

MR. DICKERSON: Mrs. Bahret or Mr. Bahret?

(There was no response.)

MR. DICKERSON: Mr. Mally?

MR. FLORENCE: He doesn't appear to be present today.

MR. DICKERSON: Mr. Oehler?

MR. OEHLER: Yes, here. I have a couple of questions.

MR. DICKERSON: Sure.

MR. OEHLER: I'm not a lawyer. I have to apologize. I haven't got counsel.

MR. FLORENCE: You don't have to apologize for that.

MR. DICKERSON: O.K.

MR. OEHLER: My questions probably--

MR. FLORENCE: Very refreshing.

MR. DICKERSON: We will note that Mr. Oehler is not an attorney and, therefore, he will be granted some --

MR. FLORENCE: Latitude.

MR. DICKERSON: -- latitude or leniency in phrasing of his questions. I will only remind you that the purpose of cross-examination is questions, not statements, if you'll press on.

MR. OEHLER: Fine. Thank you. I have two areas of concern. One is as a resident of the town and property owner, my property. The other is as a taxpayer, that is, the things that will affect

the whole town, things for which I pay taxes, and I have two questions each in those regards.

CROSS-EXAMINATION
BY MR. OEHLER:

Q. You said that you had liability insurance. I'm not an expert in insurance either, all right? I don't know the extent of the coverage. I know what the amounts mean. I don't know what the word "individual" and "aggregate" mean. If you look on the contract, Exhibit 19 --

A. The certificate?

Q. The certificate, that are two headings in this corner --

A. Right.

Q. -- identified both on an individual basis and an aggregate basis. Does "aggregate" say that's the total amount of money that could be paid to any one person or total amount of money to be paid in general?

A. I think for one incident in the aggregate as it might affect more than one person.

Q. And one incident would be a massive failure of the water, for instance?

A. That would -- might be one of them, yes, I

suppose.

Q. O.K. The other part of this problem is, has there ever been any insurance paid for water failures? Is there any -- I don't know even if he's the right one to ask that question, but my concern is he has insurance. I have insurance; everybody has insurance on something. It pays for certain things and certain things it does not. Some of them are excluded in the contract. Other things have never been tried. There's been no previous examples of it. I wonder if there are any examples of water failures to surrounding areas where general business policies have applied to that and covered it.

A. When you say "water failures," you refer like to what?

Q. Wells going dry.

A. Oh, you mean your well going dry?

Q. Yes, or my neighbor's well.

A. Oh, all right. If it were proven that our system caused that problem, then I think it could very well be imposed upon us as a -- as an element of damages which we would have to pay and I would -- I would judge that if we didn't pay it that our

insurance would -- would cover it.

Q. O.K. Has it ever been proven to your knowledge before?

A. Well, we've never had the problem.

Q. I understand that, and I wonder in general, does anyone know?

A. I would say this, however, that if our system were to cause your well to go dry, service -- water service would be provided or, in the alternative, a new well could be drilled and we would pay.

Q. O.K. I still don't know whether I have an answer to my question and that is whether or not there's anything in the record, not this record but any record any place, that says that a water failure has occurred and it's been proven to be the result of a massive pumping operation.

A. Can I -- can I -- I think Mr. McPhee can give you a lot better information on that than I can.

Q. Sure.

A. You live on Warren Street?

Q. No, I live right up the hill from the well area.

MR. DICKERSON: Mr. McPhee will testify as to the well tests and pumping tests that

were made on the wells.

THE WITNESS: Yes.

MR. DICKERSON: On the test wells.

THE WITNESS: I believe Mr. McPhee or Tom Sullivan, either one of them will.

MR. BLASI: There's Mr. McPhee and Mr. Ruggiero and Mr. Sullivan of Lauman's are going to be available. There will be three gentlemen.

MR. DICKERSON: All right, we will have some technical information.

MR. OEHLER: All right, fine, I'll add some questions on this problem.

MR. DICKERSON: All right. Mr. McGann, you did indicate that in case of a well failure of the surrounding neighbors and it was attributable to your operation --

THE WITNESS: To our operation.

MR. DICKERSON: -- that either water service or a compensatory well will be provided.

THE WITNESS: We will do one of two things and you could make the election. We would provide you with service, water service, from our system or, in the alternative, provide you with a

new well at our total expense.

MR. OEHLER: The question still is proof of that. I don't know what the --

MR. BLASI: It's engineers.

MR. DICKERSON: I think we can focus in on that later.

THE WITNESS: Yes, fine. If I do recall, I might add that Heritage Village was not on the land records but during the course, I think, we have houses located sporadically within the project itself that are not owned by us, that are families, that are single-family residences and there was a pipe one day that got pulled up like spaghetti by a bullfozer or something, and we just put in a new well.

BY MR. OEHLER:

Q. O.K. The second question has to do with the extent of liability in the town with regard to the sewerage and water corporations. I was rather confused by the structure, the Heritage Development Corporation, the Heritage Hills of Westchester, a water supply corporation and a water, sewerage or whatever it's called, transportation corporation.

MR. BLASI: So was I.

MR. OEHLER: Excuse me?

MR. BLASI: So was I when I got started with it.

MR. OEHLER: Fine. I don't see where they have any real assets. I have a house; I have a mortgage on the house. I can't give my house to someone as collateral because someone else owns my house. I don't see where these corporations have assets. Now, Town Law, Article 12, requires that stock be given, held by the town. That stock, I wonder what the value of that stock is if, in fact, what it's purporting to own is nothing more than construction loans.

MR. BLASI: Oh.

MR. DICKERSON: Do you want to field that?

MR. BLASI: May I answer that?

MR. OEHLER: Yes, sure.

MR. BLASI: Let's refer to the water corporation first. Mr. McGann testified that from this \$18½ million there would be the funds available for the construction of a water system in the first

instance. There may not be some pipes where they don't have to be serviced. Those corporations must be funded. The cost of the water supply, the cost of creating the water system becomes an asset of the water works corporation and it is on the basis of the assets of the water works corporation that the Public Service Commission permits them to fix or the Public Service Commission fixes the rates which they are permitted to charge for the water.

MR. OEHLER: O.K. Is there any liabilities of that corporation?

MR. BLASI: The liabilities of the corporation, they would be I suppose, for salaries, current expenses and whatnot, but the capital investment has to be the water system.

MR. OEHLER: I understand that.

MR. BLASI: So you're talking about -- I'll wait for Mr. McPhee's number but I know it's over a million dollars. It's a million something.

MR. OEHLER: Is that borrowed money?

MR. BLASI: That is money that has to be made available to these corporations. It's borrowed to the extent that it is a rolling line of

credit as Mr. McGann expressed.

MR. OEHLER: I understand there will be a physical plant. There will be physical pipes, there will be physical pipes.

MR. BLASI: That's the assets, right.

MR. OEHLER: All right, who holds title to those?

MR. BLASI: The water corporation.

MR. OEHLER: And that's a title free and clear?

MR. BLASI: Well, I don't know how free and clear it is, but it's there and it's on the basis of those assets that the whole regulation comes into play.

MR. OEHLER: Thank you.

MR. BLASI: Mrs. Daly?

MR. VAZZANA: Mr. Dickerson, I have --
I'm sorry.

MR. DICKERSON: Miss Eustace?

(There was no response.)

Mr. Dineen?

(There was no response.)

Mr. Muenzinger?

(There was no response.)

Mrs. Rauch?

(There was no response.)

Mrs. Nardelli?

(There was no response.)

Mrs. Goldman?

(There was no response.)

And Mrs. Robertin. I noted the appearance late yesterday of another party who had wished to appear on the stream protection aspects of this hearing, Mrs. Peter Robertin of Warren Street, Somers, New York. Mrs. Robertin have any questions of this witness?

(There was no response.)

Mr. McGann -- or excuse me, Mr. Vazzana. Did you have --

MR. VAZZANA: Yes, in line with what this gentleman had, may I see that Exhibit 19?

BY MR. VAZZANA:

Q. Mr. McGann, Exhibit 19 refers to any damages which may be done to individuals, is that right, or land owners?

A. Anyone, yes.

Q. Is that correct?

A. I believe it's anyone.

Q. Anyone?

A. Individuals, corporations, whatever.

Q. Are you familiar with the regulations, rules and regulations of the Department of Environmental Conservation?

A. No.

MR. BLASI: Neither am I.

Q. Has any bond been posted with the Department of Environmental Conservation or with any agency, state agency or local agency, in reference to the water disposal system?

MR. BLASI: Are you talking sewage or are we talking water?

MR. VAZZANA: We're talking about water first.

A. No, I don't believe so.

Q. Is there any provision made anywhere to insure any damage to the water course --

A. I have --

Q. -- that may occur?

MR. DICKERSON: Mr. Vazzana, you

referring to the stream protection aspects of this?

MR. VAZZANA: That's correct, I'm referring to stream protection.

MR. DICKERSON: To the construction and effect on the stream, whether any bonding had been -- any bond to the Department had been made yet?

THE WITNESS: No, it hasn't.

MR. BLASI: Well, may I ask, counselor -- and I don't want to interfere, but Exhibit 19 says that it cannot be cancelled until notification is given to the Department of Environmental Conservation, the policy cannot. Now, if you're referring to bonds relating after the -- any approvals are given, we wouldn't put those up until the Department told us that they approved and what the amount of the bonds would be because we couldn't fix those, am I -- am I off base in that? I mean we can't possibly put up bonds yet.

MR. VAZZANA: But you do intend to put up a bond, is that correct?

MR. BLASI: Oh, I don't think we have any choice.

MR. VAZZANA: I ask the Hearing Officer to take official notice of Article 15 of the Environmental Protection Law, Section 15-09.

MR. FLORENCE: Section 15-1509?

MR. BLASI: Oh, Section 15-1509.

MR. VAZZANA: 15-1509. Wait a minute.

MR. BLASI: May I see it, counselor?
It will save me some time.

Oh, yes, Mr. Dickerson, the section says, if I may read it, that "the Department may require the posting of a bond by permittees conditioned upon compliance with the terms of permits issued pursuant to the provisions of Title 5 of this article,"no argument about that.

MR. DICKERSON: And the section is
Section 15 --

MR. BLASI: Section 15-0509.

MR. DICKERSON: I will take judicial notice of Section 15-0509 of the Environmental Conservation Law. I couldn't find it in my book.

MR. VAZZANA: I ask the Honorable Administrative Officer to take judicial notice --
I should be saying official notice -- take judicial

notice of Part 608 of the Rules and Regulations for the administration of the Environmental Conservation Law, Article 15, Title 5, "Protection of water and sewers," under Public Law 91-204, Section 21(b). Would you like to see that?

MR. BLASI: Yes, please.

MR. FLORENCE: 608? I only have it to 602.

MR. BLASI: Subdivision (c), counselor? 608.15. Now, this is the Rules and Regulations for the administration --

MR. VAZZANA: That is right, the official rules which have been filed. Those have been filed with the Secretary of State.

MR. BLASI: Thank you, counselor.

MR. VAZZANA: No objection?

MR. BLASI: No objection whatsoever.

MR. VAZZANA: That's all.

BY MR. FLORENCE:

Q. Has your organization or any of your organizations been summonsed for violations of the Stream Protection Act at this time?

MR. BLASI: I object to that.

MR. DICKERSON: Just a minute, please. I'll take judicial notice of Part 608, Title 6 of the Official Compilation of the Codes, Rules and Regulations of the State of New York.

MR. BLASI: Yes, sir.

MR. DICKERSON: Now, where were we? Mr. Vazzana, did you have any more questions?

MR. VAZZANA: No, I have no more questions.

MR. DICKERSON: Are there any further questions before I ask a few and let Mr. McGann off of the hook?

MR. VAZZANA: He was just asked if any of his organizations have been summonsed for any violations of the Stream Protection Act as they existed since the institution of this program here.

MR. BLASI: And I entered an objection to that as irrelevant, incompetent, and immaterial on that basis for this hearing. I'm sure the Department of Environmental Conservation has full records of anything that may have occurred with reference to everybody.

MR. FLORENCE: It may have but not

the Hearing Officer.

MR. BLASI: It's not a proper question at this time and it's intended to prejudice this applicant, so I make the objection.

MR. FLORENCE: It would prejudice, I agree, if in fact he hadn't made a violation because what we're talking about here is what he intends to do in the future and I think it would bear on the intention.

MR. BLASI: Mr. Florence, counsel for the DEC cited some sections and asked the Examiner to take judicial notice of them. Now you are introducing something entirely new and irrelevant and I don't think it's a proper cross-examination of what Mr. McGann testified to on direct.

MR. DICKERSON: Objection sustained.

MR. FLORENCE: And may I be on the record, Your Honor, as saying that I respectfully except to your ruling and the basis for my exception is that it tends to go to, number one, the competency of the organizations for what they have already done in relation to their activities on the property as against what they promise to perform in the

future and in point of fact, it may be Mr. Blasi is right, that it would be prejudicial for you to know the answer to that question.

MR. BLASI: I move to strike out the comments of counsel. It is not testimony.

MR. DICKERSON: His exception is noted. As I indicated before, nothing will be stricken from an administrative record.

Mrs. Saia, did you have a --

MRS. SAIA: Yes, in reference to Mr. Florence, I also would like to find out about this. Damages have occurred because disturbance of -- of the Brown Brook and I would like to know about it.

MR. DICKERSON: We will get to this.

MRS. SAIA: I would want it directed to who is going to be responsible for damages that have already occurred.

MR. DICKERSON: First, if we're going to get into that, we'll have to establish by direct testimony that damages did occur and if you're prepared to make these statements when it -- I'll handle this when we get to each case. In other words, somebody's going to have to claim under oath

that damages occurred and that this particular group did it and then that particular issue will be opened but before then I won't entertain any questions on it.

Mr. Oehler, did you have any questions?

MR. OEHLER: A similar comment.

MR. DICKERSON: O.K. We'll cross that bridge when we come to it. Are there any further questions as to what Mr. McGann has testified before?

MR. VAZZANA: I think Mr. Florence should be given an opportunity --

MR. FLORENCE: I was going to ask Mr. Mally who was the Judge in the matter to take the stand but he has disappeared from the room. He was here; now he's not here.

MR. VAZZANA: I think there's an unanswered question. I think you asked a question that's unanswered.

MR. DICKERSON: And there was an objection to it and the objection was sustained.

MR. BLASI: He ruled.

MR. DICKERSON: Now, Mr. McGann, I

have two questions just to clarify this. You are going to handle some -- or propose to construct some approximately 3,000 or 3,100 condominium units?

THE WITNESS: Yes.

MR. DICKERSON: In which the residents in each unit will own a portion of their unit and a portion of the home. Now, is my understanding correct that of this 3,100 units there will be several individual condominium associations or groupings?

THE WITNESS: Each condominium is required by the statute, the Condominium Act, to have its association, its own association.

MR. DICKERSON: By "each condominium" you mean each building?

THE WITNESS: No, no. Each -- each condominium will contain approximately 120 residential units, give or take 10 one way or another.

MR. DICKERSON: O.K. That's close enough.

THE WITNESS: We will try to build them uniformly.

MR. DICKERSON: What will be the association? In other words, you're going to divide

this thing into 20-some roughly condominium projects?

THE WITNESS: Yes.

MR. DICKERSON: Phase by phase?

THE WITNESS: Yes, approximately.

MR. DICKERSON: Now, the water system will be under your direction and control and will be selling water to the individual units?

THE WITNESS: Yes.

MR. DICKERSON: And to the condominium associations or groupings for their common purposes.

THE WITNESS: Right.

MR. DICKERSON: Will these facilities be metered?

THE WITNESS: Well, that -- that's a good question. If they're required to be metered, they will. We have presented on several occasions, arguments to the effect that because of the nature, the thoroughly unique nature of the project, that by metering each separate unit about all we do is add to the cost of the water system and the cost of the service. These meters have to be maintained, they

have to be read. Our experience in Southbury has been that we don't even reach a minimum user of water or use of water to justify the meter because these are not families that have three loads of washing a day and fill their swimming pool every other day and this type of thing. They're limited principally to adults and less than two in a household and they just don't use that much water. However, if it is required that each unit be metered, we will meter them, but we prefer not to.

MR. DICKERSON: But you do propose to meter the sources?

THE WITNESS: Oh, yes. Oh, absolutely, right, and any general service, i.e. to other than a condominium unit.

MR. DICKERSON: And the estimated cost of the water construction and the sewer construction will be done by your engineer?

THE WITNESS: Yes, Mr. McPhee will.

MR. DICKERSON: O.K. Thank you very much.

MR. OEHLER: Mr. Dickerson, I just want to point out one more thing that I thought of

that may be of interest to you. They applied for 3,100 units. Under the Zoning Law without going back to public hearing in the town, they can go up by five percent more. I don't know whether this has any bearing. We're just saying the population may change.

MR. DICKERSON: I might as well make one comment. The authority of the Department and the authority of the towns on these matters are overlapping in that both exercise jurisdiction. In order for him to -- for the applicants to go forward with their project they must have our Department's approval. The fact of this approval, if granted, will in no way limit the jurisdiction of the town or the county or other agencies. They may deal with simultaneous jurisdictions. If there are such, they will need both approvals but they have to get our approval for their project.

Now, if the project is going to be considerably changed in scope, enlarged, the service areas changed, great increases in the sources, a new application for additional service or an additional source will be required by our Department.

The details of this at this point are still unclear until we get technical evidence and this would all be spelled out carefully, the limits that we had given approval if it is granted in the decision that will be rendered by the Commissioner.

I normally will make one more comment that I would save to the end but when this hearing is closed, the procedure is that -- or the law requires that a decision be rendered within 90 days. I'm sure the applicant, and I know my superior like to see that turned out a lot faster, so that the decision will be drafted, a report of this hearing and my recommendations will go to the Commissioner and he will make the decision and change the draft or do whatever he feels is proper and then the decision will be rendered and whatever is in that decision will be binding on the applicant and if he is limited, then any changes or extensions beyond that point would require a new application to the Department.

I make one final comment that the options to the Department are to approve the project as proposed, which happens very rarely, to reject

the application which does happen, and to modify the application, which is the normal course of events. Now, these modifications may be very minor just to insure that the -- for example, that the water supply would be properly treated by chlorination or some other means. This is the usual thing, so that the conditions would be imposed if the application were approved in almost all cases and the applicant would then have the choice of either complying with these conditions or not building his project. We have three options. It's not a go or no-go. It's approve, reject or modify and modification implies that conditions will be imposed.

I have no idea of what my recommendations will be at this point and I may not have any idea at the close of the hearing until I sit down and start going through all the paper work, but this is the procedure that is followed and then the matter is presented to the Commissioner. I usually make these remarks at the end of the hearing, but I wanted to clear up the procedure on this.

Now, variations at the town level, if

they do not contradict the scope of the decision when it is written, are not matters of our concern.

Does that clear up some of the issues then?

Mr. McGann, you're excused.

(Whereupon the witness was excused.)

MR. DICKERSON: Mr. Blasi, do you wish to call another witness --

MR. BLASI: Yes, sir.

MR. DICKERSON: Or should we --

MR. VAZZANA: May we have a recess?

MR. DICKERSON: We'll take a recess, lunch break or whatever. I was originally planning to break around 12:30 but we have what appears to be a reasonable and normal time to break right now. How much time will people want for lunch?

Let's resume at quarter to one.

(Whereupon, at 11:45 A. M. a luncheon recess was taken until 12:45 P. M.)

AFTERNOON SESSION

MR. DICKERSON: Ladies and gentlemen, I think we'll continue and try to make a good afternoon of it.

Mr. Blasi, are you --

MR. BLASI: Yes, sir, Mr. McPhee, are you --

WALTER MCPHEE

called as a witness for and in behalf of the Applicant, having been first duly sworn, was examined and testified as follows:

MR. DICKERSON: Would you please sit down, give your name, address and professional affiliation.

THE WITNESS: My name is Walter McPhee; I live in Briarcliff Manor here in Westchester, and I am the consulting engineer to Heritage Hills of Westchester on both the water supply and the sewage end of the project.

MR. DICKERSON: Mr. Blasi?

MR. VAZZANA: Did you say "property" there?

THE WITNESS: Project.

DIRECT EXAMINATION
BY MR. BLASI:

Q Mr. McPhee, just briefly a few questions and then I will offer as an exhibit later a statement of his qualifications just to cut time. I'll explain that to the Hearing Officer. Mr. McPhee, are you a graduate of Manhattan College School of Engineering?

A. Yes.

Q. What is that degree?

A. Bachelor of Civil Engineering.

Q. In what year was it?

A. 1943.

Q. And are you also -- do you also have a graduate degree from New York University?

A. Yes, Master of Civil Engineering in 1949.

Q. Now, Mr. McPhee, are you a member of the American Academy of Sanitary Engineers?

A. Yes, I am a diplomate of the American Academy of Sanitary Engineers.

Q. Just what does that mean?

A. That is the highest level of admission into the Academy for a person practicing in the sanitary

engineering field or the environmental engineer-

ing field.

Q. And are ydu also a member of the National Society of Civil Engineers?

A. Yes.

Q. Now, what other society would you care to mention?

A. I am a fellow of the American Society of Civil Engineers. I'm also a member of the Water Pollution Control Federation. I believe those would be the pertinent associations. I'm also a licensed engineer in New -- the State of New York, New Jersey, Ohio, Pennsylvania and Maryland.

Q. And in your experience, have you designed water and sewage systems?

A. Yes, many of them.

Q. And were you connected with some water sewage systems also outside of the United States?

A. Yes, several in Europe and some in the Far East.

Q. Now, Mr. -- I -- just a moment.

MR. BLASI: I ask that this be marked for identification, Mr. Dickerson. It consists of three sheets, statement of qualifications of Mr. Walter McPhee.

MR. DICKERSON: For identification Ex-

hibit 20. I will entitle it "Statement of Qualifications."

MR. BLASI: Yes.

MR. DICKERSON: It is a statement of Mr. McPhee's present associations, his educational background and a two-page statement of his past experience, his professional memberships and professional licenses.

(The "Statement of Qualifications of Walter McPhee" was marked for identification as Exhibit Number 20, this date.)

BY MR. BLASI:

Q. You said you what, were licensed in the State of New York?

A. Yes.

Q. And annexed to this exhibit, is this a photocopy of your license?

A. Of the recent license which expires, I believe, in '74.

Q. Now, Mr. McPhee, if I were to ask you questions regarding your qualifications as set forth in Exhibit 20 for identification, would you set forth in your answers the statements that are contained in this

Exhibit 20 in reply to my questions?

A. Yes.

Q. In order to take a little short-cut.

A. Yes.

MR. BLASI: I offer it in evidence.

MR. DICKERSON: Any objection?

(There was no response.)

Exhibit 20 is received into evidence.

(Exhibit Number 20 previously marked for identification was received in evidence, this date.)

Q. Now, Mr. McPhee --

MR. BLASI: May I sit down, Mr. Dickerson?

MR. DICKERSON: Please.

MR. BLASI: Thank you.

Q. Now, Mr. McPhee, you are the engineer as you've testified you were, on this Heritage Hills project relating to water.

MR. FLORENCE: Could we have a proper form of question maybe?

MR. DICKERSON: Pardon?

MR. FLORENCE: Could we have questions

that are questions rather than statements possibly?

MR. BLASI : I didn't hear that.

MR. FLORENCE: I asked that you not ask leading questions.

MR. DICKERSON: Counsel is raising an objection directed to the form of your questions.

MR. BLASI: You're objecting to the form. All right.

Q. Mr. McPhee, what is your connection with Heritage Hills of Westchester which is the subject of this hearing before Mr. Dickerson?

A. I have been retained as their consulting engineer. My firm has been retained and I actually function as manager engineer for the project on the water supply and the waste water disposal facilities.

Q. Mr. McPhee, would you describe what work you have done, the project, and give us a statement of what these two -- what these two facilities are about so we can perhaps expedite that and get it into the record.

A. I have a prepared statement I'd like to read and actually I have a copy if this would be of some help to the stenographer. I will stick to the statement

and not deviate. If I do, I'll tell you I'm deviating. Some of it will be repetitious, but I think we should have it presented here to complete the picture.

The Heritage Hills of Westchester project is being constructed on approximately 836 acres of land in the Town of Somers, Westchester County, New York. This land lies north of Route 202 and west of Routes 202 and 100.

The Heritage Development Group, Inc. of Southbury, Connecticut will construct a 3100-unit condominium complex. Construction is estimated to take seven to nine years to complete.

The population of the condominium complex is estimated to be 5580 when completely finished. This estimate is based on the occupancy limitations set for the units and the experience of the Heritage Group at their similar Southbury, Connecticut development. Analysis of the Southbury development over the past two to three years has shown that the average occupancy of each unit is less than 1.8 persons. This is due to the fact that the occupancy is limited to families with no children under 18

years of age.

Since there is no public water or sewerage systems available in the Town of Somers to serve the project, a water supply system and sewerage system plus a sewage treatment facility will have to be constructed by the Heritage Group to serve the development.

Engineering reports for all of these facilities have been prepared and submitted to the proper regulatory agencies for their reviews. Copies of these reports were filed with the application for water taking, the reason for this hearing. Since that filing meetings have been held with representatives of the State of New York Department of Conservation -- Environmental Conservation -- New York State Health Department, Westchester County Health Department and the Department of Water Resources of the City of New York for the purpose of reviewing the findings of the reports and incorporation of any changes these agencies required.

Q. Mr. McPhee, may I just stop you at this moment to put a couple of things in the record which I think will clarify the situation.

2-7

(Walter McPhee)

A. Yes.

MR. BLASI: May I have, Mr. Commissioner, Exhibits 9 and 10 for identification, the --

(The exhibits were handed to Mr. Blasi.)

Q. Mr. McPhee, in the course of your work, did you prepare waste water facilities reports on this project?

A. We prepared the first report, if I remember correctly in December of '72 and it has been --

Q. May I show you --

MR. VAZZANA. He hasn't finished his answer. Let him finish his answer, please.

Q. All right, go ahead.

A. The report, after meetings with the regulatory agencies, was revised, reissued in March of '73. The regulatory agencies deemed it necessary to add additional requirements after the March revision and it was revised, the last major revision being in July of this year and the report was reissued. Since the July meeting, so typo errors were found and the report has been corrected after August of this year and that is the final report that has been submitted to the regulatory agencies. I have a copy of the final revised report, the July report revis-

ed as of 8-28-73 which I would like to offer at this time.

MR. BLASI: Now, wait a minute, Mr. McPhee, just a minute please, so we don't confuse the record.

THE WITNESS: All right.

Q. I show you Exhibit 10 marked for identification. Is that the first report?

A. That is the first report.

Q. And I show you Exhibit 9. Is that the second report?

A. That is the second report.

MR. BLASI: All right. Now, I ask that this document, Mr. Commissioner, be marked for identification.

THE WITNESS: That is unsigned.

MR. BLASI: Excuse me; may I swap that?

MR. VAZZANA: Which report are you offering; is that the second report or first report?

THE WITNESS: Third report.

MR. BLASI: I'm asking that the third report be marked for identification so all three reports will bear an identification.

2-9

(Walter McPhee)

MR. VAZZANA: Have the same identification number.

MR. BLASI: No.

MR. DICKERSON: For identification, Exhibit Number 21 is a waste water facilities report bearing the month date July 1973 on the cover and on the first page, it's entitled "Waste Water Facilities Report, July 1973, Revised 8/28/73" and signed by Walter McPhee, P. E.

MR. BLASI: Now, I would like -- I offer in evidence the three reports, Mr. Commissioner, Exhibits 9, 10 and 21.

MR. DICKERSON: Any objection?

MR. FLORENCE: Yes.

MR. BLASI: State your objection.

MR. FLORENCE: May I inquire?

MR. DICKERSON: You want to state the grounds for your objection?

MR. FLORENCE: Yes, I will in a moment. I think they'll be obvious.

VOIR DIRE EXAMINATION
BY MR. FLORENCE:

Q. Mr. McPhee, when were you then retained by Mr.

2-10

(Walter McPhee)

Paparazzo or whoever retained you in connection with this application?

A. In December of '72.

Q. I see. And is the work in these manuals the sole product of your efforts, your personal efforts, number one?

A. The work in the manual was done -- exactly what do you mean by "work in the manuals?" There is reference --

Q. Well, as I understand it, you did a report.

A. Right.

Q. And that this is one of these reports, this one that I happen to have in front of me that's number 21 that's offered in evidence. As I understand it, you are the McPhee of the --

A. Nebolsine, Toth, McPhee Associates.

Q. -- Nebolsine, Toth, McPhee Associates, and I had earlier understood that you had prepared these records -- reports, excuse me. Now, the question is: Did you personally prepare it in its entirety?

A. I prepared the report as presented in its entirety.

Q. I see.

A. Now, I could qualify that in the sense that in any report you have to make reference to other reports and other material. Therefore --

Q. Were you in any way associated with Dolph Rotfeld Associates, the environmental -- Environmental Protection Administration?

A. Prior to the preparation of this report, I was.

Q. Well, is he in -- or was he in your organization at the time you made this report?

A. No, I was a sub-contractor to him.

MR. FLORENCE: Oh, I don't object to anything that Mr. McPhee has prepared personally or has been prepared by his organization under his supervision. I do object for the obvious reason that I can't cross-examine anybody who has made statements in here who is not testifying.

MR. BLASI: Mr. McPhee, are you familiar with the contents of each of these reports?

THE WITNESS: Yes.

MR. BLASI: And as to each of these reports, you and Nebolsine, Toth, McPhee and Associates worked and prepared on these reports?

THE WITNESS: I personally wrote the

report.

MR. BLASI: All of them?

THE WITNESS: All of them.

MR. BLASI: I'll offer them all in evidence.

MR. FLORENCE: Let me inquire then.

BY MR. FLORENCE:

Q. Your statement that on the stationery of the City of New York Environmental Protection Association, and the correspondence between Mr. Rotfeld and the City of New York, you personally did that?

A. No, of course not. It was on the New York City stationery. How could I write it?

Q. Well, was Mr. Rotfeld an associate of yours working for you at that time?

A. What is the date on the letter?

Q. I'm asking you the question. I'd rather you answer the question instead of --

MR. BLASI: Well, --

A. The letter predated my entry into the firm, but I did not write the letter nor did Mr. Dolph Rotfeld write the letter.

Q. Well, as a matter of fact, Mr. Rotfeld was your pre-

decessor?

A. I stated that before; I was a subcontractor to him.

Q. And, therefore, you did not write the letter nor do you claim authorship of the correspondence between the City of New York and Mr. Rotfeld as it's included as Appendix B in this report; isn't that a fair statement?

MR. BLASI: I object to that.

A. The authorship --

MR. BLASI: I object to that, Your Honor.

A. (Continuing) The authorship is only the person who signed the letter.

MR. BLASI: Mr. Commissioner, Mr. Hearing Officer, that is an exhibit attached to the report written by Mr. McPhee. He says he's written the report. It's just some material that is put in there as an addendum and an exhibit to his report, correspondence with the City of New York.

THE WITNESS: I think I've answered your question. I can't claim authorship to a letter written by -- memorandum written by Paul Eastman,

Director of the Division of Pure Waters of the State of New York nor can I claim authorship to a letter written by Raymond E. Lupe from the Department of Environmental Conservation.

Q. Was it written pursuant to your inquiry?

A. Pursuant to my inquiry? No.

Q. In other words, you weren't either the signatory to the letter nor the addressee?

A. (Witness shakes head.)

MR. FLORENCE: Same objection.

MR. BLASI: May I point out, Mr. Dickerson, that Mr. McPhee stated very clearly he was in the matter from the beginning as a subcontractor with Dolph Rotfeld Associates and that he wrote this report and that these are all exhibits attached to his report.

MR. DICKERSON: I'm going to receive these three exhibits into evidence for what they're worth. Mr. Florence's exceptions and comments dealing with the appendices are noted for the record.

MR. VAZZANA: May I inquire on those reports, sir? May I?

MR. DICKERSON: Sure.

VOIR DIRE EXAMINATION
BY MR. VAZZANA:

Q. Mr. McPhee, you said you submitted three reports;
is that correct?

A. That is correct.

Q. And certain of those reports contained errors, is
that correct? Did I -- did I understand you; did
I hear you correctly?

A. Yes, the last report was a typographical error.
The last revision was as of 11/28.

Q. You submitted three reports?

A. Yes.

Q. And you said that --

A. Yes, I submitted three reports.

Q. May I finish please, Mr. McPhee, and you said that
there were certain errors in those reports; is that
right?

A. There was an error in one report.

Q. Or an error in two of the reports?

A. In one report.

Q. In one report; there's no errors in the other two
reports?

A. There were errors, perhaps omissions but I don't

believe errors.

Q. Can you point out to us at this particular moment commencing with the first report, second report and the third report, what errors are you talking about?

A. I think the error that I stated that was corrected as of August was one on Table I, Page 2 and 3 of the report, which you will see that that table, if you look at the report, has a revision date on the bottom of it of 8/28/73 and this dealt with the capacity of the sludge storage tank and the sludge storage tank, and on the vacuum filter loading on Page 4.

Q. Is that on the first report?

A. That is the last report.

Q. On the last report. What is the error from the first or the second report as it relates to the third report? Do I make myself clear?

A. I didn't state that there were any errors in the first or second reports. This is now six months since the -- more than six months, eight months since the first report was written. I would have to go back and pull out the literature from correspondence from Westchester County Health Department, reread

it to tell you exactly what the corrections were. Some of them were additions; some were due to omissions and some may have been done due to errors, but I don't think so. They may have.

Q. Am I correct in assuming that one, two and three of those booklets which you have are not identical?

A. They are not identical. I can tell you the major changes that were made in them.

Q. Yes, please tell us the major changes. I'm not interested in grammar or that sort of thing.

A. Yeah.

Q. We all make mistakes in grammar.

A. The first major change in -- and I will list them as three major changes. They're sequenced as far as timing. I'm not sure of it at this time; I'd have to go back again and check the correspondence, but the major changes that caused the changes in the report or caused the report to be revised and reissued was the location of the intermittent sand filters before the chlorination facilities at the request of the City of New York. The other change was actually, we had three mechanisms in the rapid sand filters and we revised them to two mechanisms. That

was another change. The major change and the last reason for the report being reissued from March to July report was the addition of alum facilities for the removal of phosphates, a requirement that was added at the last meeting or the next to the last meeting with the regulatory agencies. We had met the requirements as the first report had been from the state and as appended to the report, the memorandum from Mr. Paul Eastman. We met those requirements. An additional requirement was then added by the DEC and by the Westchester County Health Department and this was to include in the facilities the mechanisms, storage facilities and what was required for the removal of phosphates by the treatment process. Those were the major changes.

Q. Those were the major changes; is that right?

A. Yes.

Q. Let me ask you one question: So the last report that you submitted included those major changes that you referred to so for all intents and purposes the last report is "the report?"

A. Is "the report."

MR. VAZZANA: All right.

MR. DICKERSON: Could I see that, please?

Exhibit 21 then is purported in case of any discrepancies between Exhibits 9 and 10 to be the governing document.

THE WITNESS: Exactly.

MR. DICKERSON: Your exceptions are noted.

MR. FLORENCE: I would add --

MR. DICKERSON: And I will receive them into evidence for what they're worth.

(Exhibits Numbered 9, 10 and 21 previously marked for identification were received in evidence, this date.)

MR. FLORENCE: I would add to my original exception, Mr. Dickerson, the exception on the basis that the only operative report that seems uncorrected and, therefore, the truest statement of what is intended would be Exhibit 21 and, therefore, I would say that it's improper to admit into evidence Exhibits 9 and 10 as simply being uncorrected versions of Number 21.

MR. DICKERSON: I'm going to receive 9

because this was filed with the original application on the basis --

MR. FLORENCE: We'll get to that.

MR. DICKERSON: -- of which the thing progressed at least this far.

MR. BLASI: May I just comment, Mr. Dickerson, that all three reports were put in to indicate the progression of the development in the sense of why these changes were made. As Mr. McPhee testified to, they were a result of discussions, conferences, et cetera, so forth, with the regulatory agencies.

MR. DICKERSON: Thank you.

DIRECT EXAMINATION

BY MR. BLASI: (Continued)

Q. Proceed, Mr. McPhee, if you will.

A. Well, the reports that were just -- the report dated July 1973 revised as of August contains all of the changes requested by the reviewing agencies and was accepted subject -- well, I'll read it from the text to stay within the written text. I am submitting at this time a copy of the revised Waste-water Facilities Report dated July 1973 which con-

tains all the changes requested by the reviewing agencies and was accepted, subject to the findings of this hearing.

On Water supply: As previously stated, there is no public water supply available in the Town of Somers that could serve this development. The only possible exceptions to this are the New York City Aqueduct System and the Amawalk Supply. A shaft on the Delaware Aqueduct lies in the northeast corner of the Town, approximately one mile from the closest boundary of the development.

Although Westchester County has a filter plant below the dam on the New York City Amawalk Reservoir, this source of water would have been considered except that it is several miles from the development. The comprehensive water supply plan prepared for Westchester County does not show any plans for the area in question.

The topography of the development is such that there are only two sites that could be considered for adequate sources of ground water.

Test wells were constructed in the sites and test pumping indicated that the site west of

Somerstown Turnpike had the best potential for a source of ground water. Three wells were constructed in this area and simultaneously pumped for approximately 60 hours. The wells stabilized at a combined rate of 731 gallons per minute. Analysis of the aquifer the wells were drawing from showed that a safe yield in excess of 550 gallons per minute was possible

The quality of the water from the wells was excellent and meets the New York State Department of Health's drinking water standards.

Based on the estimated population of 5580 people and an average annual per capita consumption of 100 gallons per day plus a commercial demand of 44,000 gallons per day, a total average annual demand of 602,000 gallons per day is estimated for the complete development. This is equal to approximately 425 gallons per minute. The peak day of the year, based on the experience at the Southbury, Connecticut development, is approximately 30 percent greater than the annual average. This would be equal to 780,000 gallons per day or 546 gallons per minute.

Since the aquifer tested yielded 731 gallons per minute, it appears that a satisfactory water supply system can be developed for the planned development.

If, after the wells are completed and tested over a longer period of time, the safe yield should be less than is now estimated, additional wells will be tested either on the present site or other lands and if they should be inadequate, then plans will be developed to tap the New York City Aqueduct.

Since the project is planned for development over a seven- to nine-year period, more than sufficient time is available to develop the necessary data to accurately measure the safe yield of the wells being planned.

The water supply system will consist of the following items:

Two or three gravel packed wells equipped with submersible pumps;

A covered receiving basin for the well water where it will be chlorinated and disinfected in accordance with the New York State Depart-

ment of Health Standards;

A pumping station adjacent to the receiving basin for raising the water into the distribution system. The pumping station will be equipped with a standby generator to provide emergency power for the wells and the high pressure pumps.

Distribution system sized to meet the domestic demands of the development and fire fighting demands. The systems will be equipped with hydrants.

A one-million gallon storage tank to insure sufficient water for normal hourly peaks and fire protection.

The system will be designed to maintain a minimum pressure of 35 pounds per square inch except during times of fire flows, when the pressure may drop to 20 pounds per square inch.

The wells and water system will be constructed entirely on the lands presently owned by the applicant. No adjacent properties should be affected by the wells. If, by change, some local wells in the aquifer being tested or tapped are prov-

en to be affected, the Applicant will provide water services to the affected areas.

The development as now pro... approved by the Town of Somers is the complete development and no extensions are presently planned.

The cost of the entire system is estimated to be \$1,750,000. This cost is made up of the following: Wells, \$100,000; receiving basin, \$50,000; Pumping Station, \$150,000; piping and hydrants, \$1,050,000; booster pumping station, \$50,000; storage tank, \$350,000, to a total of \$1,750,000.

Sewage Treatment: In addition to the wastewater from the Heritage Hills Development that ends up as sewage --

MR. BLASI: Excuse me, Mr. McPhee.

Mr. Dickerson, at this point, I would like to offer in evidence those exhibits that were attached to the application which relates to the water. I think it's appropriate at this point to put them in. There was attached Exhibits 3, 4 and 5 at this point. Thank you.

Q. Mr. McPhee, I show you Exhibit 5 for identification

and ask you if this is a water supply report which was prepared by you for filing with the Department of Environmental Conservation?

A. Yes.

Q. I show you Exhibit 3 which -- and marked for identification and ask you if this is the Exhibit B which was attached to the application and is referred to as the general location -- and bears legend "General Location Map?"

A. Yes.

MR. FLORENCE: What exhibit number is that, please?

MR. BLASI: That is Exhibit 3.

Q. I show you Exhibit 4 marked for identification by that number and which is referred to as an attachment to the petition as Exhibit C, and bears legend, "General Layout Water Supply System" and ask you if that was prepared by you as part of your presentation?

A. Yes.

Q. Now, I show you Exhibit 6 which is marked Exhibit E attached to the petition and ask you if that is a laboratory report that was submitted with your water

supply report?

A. Yes.

MR. BLASI: I would like to offer these exhibits in evidence now.

MR. FLORENCE: May I inquire?

MR. DICKERSON: Let's take a two-or three-minute break while the documents are being examined if you want to relax and talk.

(Whereupon a short recess was taken.)

MR. DICKERSON: Ladies and gentlemen. Any objection to 3, 4, 5 and 6?

MR. FLORENCE: May I just inquire very briefly?

VOIR DIRE EXAMINATION
BY MR. FLORENCE:

Q. Were these maps made prior to the establishment of the district, Mr. McPhee or after the establishment of the district, if you know?

A. I do not know.

Q. By what means did you come to a decision as to where to draw the boundaries on this water supply?

A. The property lines of the Heritage Hills.

Q. The property itself?

Q. It's simply a memorializing whatever the legal description is of the boundaries?

A. That's right.

Q. Is -- did that include --

A. Not only -- well, actually we use the property maps of Heritage Hills as our base.

Q. All right. And you included in that map not only the boundaries for the designed residential district but also the other properties owned by Heritage Hills or whoever, Mr. Paparazzo, Mr. McGann or any of their --

A. I can't answer that. I don't know whether the map that we had included the additional acreage for the commercial acreage or property.

MR. FLORENCE: Right. I don't have any challenge to the Exhibit Number 4 or Exhibit Number 3.

MR. DICKERSON: Exhibit 3 and 4 will be received into evidence.

(Exhibits numbered 3 and 4 previously marked for identification were received in evidence, this date.)

MR. FLORENCE: I will object to Exhibit

Number 5 to the extent of those portions of the report which were prepared by others not testifying and I refer specifically to Mr. McPhee:

Q. Are you associated with the Lauman Company?

A. Lauman Company was a contractor to Heritage Hills for the test pumping.

Q. You didn't hire them, did you?

A. I did not.

Q. And, in fact, you don't have any association with them other than accept their whatever information you get from them, assuming that you requested it and wanted it?

A. Yes.

MR. FLORENCE: Again, since I can't cross-examine the absentee, I would say that I find it, I submit that that's objectionable. There are other parts of the book which I would -- of this report which purport to state what the law and the requirements are that I would have only the technical objections. I would assume that, Mr. Dickerson, you would be guided by that, those statements, but aside from that, I don't have any objection to what Mr. McPhee's done, what he purports to be first

person, or that of his own organization.

MR. BLASI: Mr. Sullivan of Lauman Company will be available. He couldn't be here today.

MR. DICKERSON: O. K.

MR. FLORENCE: That just dramatizes the problem.

MR. BLASI: No, it's --

MR. DICKERSON: All right, he will testify concerning the --

MR. BLASI: His preparation of those.

MR. DICKERSON: Concerning those pages involving the well logs, the pump test and the laboratory test and the facts in the back of this report.

MR. BLASI: Yes, sir; yes, sir.

MR. DICKERSON: I am not going to rip this exhibit apart. I will receive the first part of it into evidence and the second part of it will be received for what it's worth at this point. Mr. Florence's objections are noted and I'll leave that issue hanging for the moment if you will.

MR. FLORENCE: May I ask, as you --

may I suggest this, Mr. Dickerson, and just simply for administrative expediency, that as far as the introduction of reports by any other persons that are submitted with Mr. McPhee's report, I would continue to object until such persons would be produced. Now, if you are ruling that they are not -- they are still offered for identification but not admitted until that person is examined or submitted for cross-examination that would be fine with me.

MR. DICKERSON: What I was trying to say bluntly, is that I recognize your objections. I will acknowledge them. If you want an official ruling, I will overrule them and receive this entire document for what it's worth. However, it is obvious that certain portions of this material at this moment have more substantial grounds than others.

MR. BLASI: Right.

MR. DICKERSON: I'll at least reserve for the applicant the opportunity to substantiate the latter pages in this report and if he does not, he does not at his own peril.

MR. BLASI: Correct, sir.

MR. DICKERSON: That takes care of Exhibit Number 5. Exhibit Number 6, I will -- you object to Exhibit Number 6 or you want to --

MR. FLORENCE: I didn't know that 6 was offered.

MR. DICKERSON: It's just the report of chemical analysis.

MR. BLASI: It's Lauman and it's also in the back of the wastewater report, as I recall it; is that correct?

THE WITNESS: Water supply report.

MR. BLASI: I mean water supply report.

MR. FLORENCE: Same objection.

MR. DICKERSON: All right, and I make the same ruling. Exhibit 6 will be received into evidence at this time for what it's worth.

(Exhibits numbered 5 and 6 previously marked for identification were received in evidence, this date.)

DIRECT EXAMINATION
BY MR. BLASI: (Continued)

Q. Proceed.

A. O. K.

MR. FLORENCE: May I inquire, just to preserve the record -- excuse me, Mr. Dickerson.

BY MR. FLORENCE:

Q. Mr. McPhee, do I state accurately that you did not prepare the report that's known as Exhibit 6, the Lauman Laboratory Chemical Report?

A. Correct.

Q. Did not supervise it, in fact; it was prepared prior to your retainer with Heritage or the principals involved in this application?

A. I believe the report was prepared afterward; I'm not sure when.

Q. November 1972?

A. Then it was --

Q. That would be before?

A. Because Lauman worked on the project from November through January and I was not sure when the report was prepared.

Q. Would it be fair to say then that this analysis, whatever is here --

A. The laboratory, I believe --

Q. -- preceded your retainer?

A. The laboratory, I believe, has a registration

number and as such the report has some validity.

MR. FLORENCE: I object.

MR. DICKERSON: Noted. O. K., gentlemen, let's get on with it.

BY MR. BLASI:

Q. Go ahead then.

A. Sewage Treatment: In addition to the wastewater from the Heritage Hills Development that ends up as sewage, the development plans to treat the sewage from an adjacent subdivision of 300 acres containing 250 single-family homes. This subdivision is located at the northeast corner of the Heritage Development. The subdivision will develop its own water supply system. It is estimated that this subdivision will add approximately 100,000 gallons per capita of wastewater --

Q. Excuse me, you didn't mean per capita.

A. Excuse me, gallons per day.

MR. FLORENCE: Would you read that again?

THE WITNESS: O. K.

A. (Continuing) It is estimated that this subdivision will add approximately 100,000 gallons per

day of wastewater to those of the Heritage development.

For design purposes the wastewater flows from the Heritage Development are assumed to be equal to the water demand; that is, an annual average daily flow of 602,000 gallons per day. With the addition of the 250-home subdivision the total sewage flow is estimated to be 702,000 gallons per day.

Although the County of Westchester has a comprehensive sewage plan for this area, the County officials indicate that it may be ten years or more before any of it is implemented. The County plans call for a trunk sewer to be constructed along Route 116 to a point just over the Town of Somers' line. This trunk sewer will terminate approximately 5000 feet from the lowest point in the development.

Based on the above facts the development will construct an advance waste treatment facility to treat its wastewater. The treated wastewaters will be discharged into the brook that crosses under Route 202 just west of Warren Street. The point of discharge will be on the south side of

Route 202. The brook has been referred to by some people as "Brown's Brook."

On streams similar to Brown's Brook, the New York State Department of Environmental Conservation considers them in the category of intermittent streams, that is, streams that may dry up on occasion. Because of this the State sets very stringent water quality standards for such streams. The State requires the following criteria be met: Biochemical oxygen demand, five milligrams per liter or less; free ammonia measured as nitrogen, two milligrams per liter or less and dissolved oxygen seven milligrams per liter or more.

In addition to these standards, the State, Westchester County and the City of New York require that the phosphates in the wastewater be removed to an average level of five tenths of a milligram per liter or less, measured as phosphorus.

To meet these requirements, Heritage Hills will construct an advanced waste treatment facility on their lands just east of Warren Street and north of Route 202.

The plant will be designed to treat an average flow of 702,000 gallons per day with peaks up to 1,7550,00 gallons per day. The plant will be designed using three modules up through its clarification stage. Only two of the modules will be equipped initially, although all structures for the full plant will be built. The two modules will provide more than sufficient quan... capacity for the first four years of development.

The treatment process will consist of the following unit operations:

1. Comminution or grinding of the sewage.
2. Extended aeration (24 hours of activated sludge.) This process will remove carbonaceous and nitrogenous BOD and will precipitate phosphates.
3. Clarification.
4. Rapid sand filtration.
5. Intermittent sand filtration.
6. Chlorination-disinfection.
7. Post-aeration.

Initially only one third of the inter-

mittent sand filters will be built. Depending upon the performance of the rapid sand filters, the remaining two thirds may or may not be built. This decision will be made by Westchester County Health Department and the New York City Department of Water Resources.

Sludges produced by the waste treatment facilities will be initially chemically treated and dewatered at the plant and disposed of as soil conditioners at the site. When the plant is fully equipped ~~and the need for soil conditioners has been reduced~~ or eliminated, the sludges will be totally oxidized at the plant and the inert residue remaining will be disposed of as landfill on the site.

Since the Heritage Group has been successfully operating similar sewage treatment facilities at their Southbury, Connecticut development for many years, the staffing and operation of this plant will not present any problems. The plant will be equipped with laboratory facilities and other equipment required to successfully operate the facilities. The plant will be equipped with a stand-by generator for emergency power.

The effluent from the facilities will meet or exceed all the water quality standards required by the Federal, State, County and City of New York authorities. Based on these standards the effluent will not pollute the receiving stream or the Muscoot Reservoir.

The discharge of the treated effluent will have an insignificant effect on the hydraulics of the receiving stream. It has been calculated that if the 702,000 gallons per day of effluent were to be retained in the marshy area south of Route 202, and this is not possible, it would increase the water levels in the marsh by 0.017 feet or two tenths of an inch.

Q. Since we're talking about water, I'll ask you --

MR. BLASI: Mr. Dickerson, I would like to offer in evidence Exhibit 7 at this time marked for identification, the letter from me to the Department of Environmental Conservation, advising them -- advising it of the creation of the water works corporation.

MR. DICKERSON: I believe that was received yesterday.

MR. BLASI: It was marked for identification yesterday, wasn't it? Was it marked in evidence?

MR. DICKERSON: Yes, sir.

MR. BLASI: All right, then I'll so mark it and I withdraw the offer at this time.

MR. DICKERSON: For those who are keeping tally on the exhibits, all exhibits offered for identification, of 1 through 21, have been received into evidence except Exhibit Number 2, Exhibit Number 8, Exhibit Number 11 and Exhibit Number 12.

MR. BLASI: You may examine Mr. McPhee at this point.

MR. DICKERSON: Mr. Florence or Mr. Vazzana, do either of you have a preference as to who goes first?

MR. DICKERSON: Mr. Florence or Mr. Vazzana, do either of you have a preference who goes first?

CROSS-EXAMINATION
BY MR. FLORENCE:

Q. I am sorry, Mr. McPhee, I didn't in any way keep up with your reading of your notes. Is there any way that I might see a copy of them? I might ask you some questions that occurred to me on some of the things that I heard. I'll be pleased to return it to you if there's a shortage. I note in your ~~opening comment that you indicate that Heritage Hills is 836 acres, the unit. Would that help you to tell me whether or not you know if other properties were included in your districts?~~

A. The one marked Exhibit No. 4 titled "General Layout of Water Supply Systems" indicates the total area of the development including commercial which will be beyond the 836.

Q. And isn't the -- would it be fair for me to conclude or to ask you rather where in relation to the designed residential development is the source of water now proposed?

A. Can I use this map (indicating)?

MR. DICKERSON: I would prefer you --

Q. Use something that's already in evidence. That's not in evidence. If it will help you, I will get to that.

MR. DICKERSON: Would it help you if we put this one up on the wall (indicating)?

MR. FLORENCE: I'm going to get to that if you'd mark that for identification for Objectant Sun. Then I will ask Mr. McPhee and he can relate to this map if that's all right, Mr.

~~Dickerson.~~

MR. DICKERSON: It doesn't matter which one.

MR. BLASI: Why don't you relate to that one?

MR. DICKERSON: Why don't we tape that one up to now.

MR. BLASI: That's an exhibit.

MR. FLORENCE: I'm ultimately going to ask him about that so I don't care.

MR. DICKERSON: I'm ultimately going to use this to mark off the well sites and things

like that. I will temporarily part with my treasure trove of colored marker pens.

MR. FLORENCE: Mr. McPhee--

MR. DICKERSON: Ladies and gentlemen, we'll continue. The Exhibit No. 4 is the item now under discussion.

BY MR. FLORENCE:

Q. In relation to Exhibit No. 4, I understand that certain wells were and are presently in existence in relation to this application for water supply, is that correct?

A. ~~Were in existence. I believe one is still in~~ existence, am I correct, Dominick?

Q. Since you're under oath, let me suggest this, Mr. McPhee: --

A. I can't swear to what the status of the wells are as of this date since the equipment was pulled eight months ago.

Q. O.K. When the equipment is pulled or was pulled, are you familiar with the area where these wells existed?

A. Yes.

Q. With a red marker, would you indicate where those

wells were?

A. Approximate location here, here and here.

(Witness marks Exhibit No. 4.)

MR. DICKERSON: Let the record show that Exhibit No. 4 has been marked with three red circles indicating the locations of these test wells.

Q. Now, isn't it also true, Mr. McPhee, that those weren't the only three borings that were undertaken for the determination of the location of wells?

A. There were many borings.

Q. In point of fact, maybe more than a hundred borings were taken in various sites and locations near and in this area, isn't that also correct?

A. That is correct.

Q. Could you tell us first of all in general terms where those borings -- what areas were included in the test borings?

A. The majority of the borings covered this area (indicating).

Q. Would that be the area outside the DRD but within the ownership of the principals?

A. Outside of the DRD but within the ownership.

MR. DICKERSON: Would you please outline that area with a green marker pen on Exhibit 4?

THE WITNESS: I don't know whether the residential line is on this map of the DRD. It is not, so I can't do it accurately.

MR. DICKERSON: Well, generalize it approximately.

THE WITNESS: I can generalize it in the sense that it is this area here (indicating).

BY MR. FLORENCE:

Q. Would it help if I asked the question this way:
~~Is it about an area constituting approximately 100~~
acres on the west side of Route 100 contiguous with Route 100?

A. Approximately a hundred acres.

Q. And over what period of time were these drillings undertaken?

A. Drillings were started in December. No, they were started before that. They were started in November and continued through the last test pumping was done in January, I believe. I'd have to look at the water supply report and I believe the well

log on that is dated 3 -- November 3rd, the first one went through, December test pumping on last well was December 21st in this area (indicating) and an additional well was tested in this area (indicating) where additional exploration was tried in January.

Q. When we talk about "this area" we're referring to the area which is nearest the intersection of Route 202 and Warren Street in the meadow area that is generally proposed for the -- a pond and model homes?

A. And the utilities area.

Q. And the utility area. Now, sir, would you mark on this Exhibit No. 4 the location of the sewage disposal facility or do you mark it on there?

A. No.

Q. Do you mark on this Exhibit No. 4 the relocation of the Brown Brook?

A. No.

Q. Do you mark on Exhibit No. 4 the means of transporting the result from the -- that is the fluid from the sewage plant, if I may use that word for the lack of technical understanding --

A. No.

Q. -- to any other places on or off the property?

A. No, since the drawing is titled "Water Supply System," it is apparently a water supply system.

Q. Where will you have on this map, Exhibit No. 4, your pumping station to deliver water?

A. Submersible pumps will be mounted in the wells. They will be delivered to a receiving and pump station here for chlorination, then pumped into the system. An additional pumping station will be built on the high ground to serve the high areas near the million-gallon storage tank.

Q. ~~Now, let's talk topographically if I may address myself to that subject for the moment. Now, the areas on Exhibit 4 indicate that there is a basin which is generally in the center of the improvements which you show here, is that correct, bordered -- or it may be the better way to state that Warren Street seems to be part of that basin and the basin runs generally in the direction that Warren Street goes.~~

A. Correct. There are two ridges that run north, one here and one here (indicating).

Q. Let's take the ridge to the east; that would be between the wells, and is this a golf course?

A. No, that's the planned golf course.

Q. And the area which is the planned golf course.

A. I believe the golf course is actually the highest point, I believe, in the residential which is about here (indicating). This would be on the ridge so the golf course is on the west slope of that ridge.

Q. Now, have you walked this area?

A. No.

Q. Are you familiar with the topographical features of it?

A. I am familiar with the topographical features.

Q. All right. Are you familiar with the pond that's up here at the lake?

A. No, I'm not.

Q. Are you familiar with the stream that drifts down through there down past this area which is not included in the DRD and then across Route 202 into another stream?

A. I know there's another stream that goes down past there. I don't know where it's out of.

Q. Have you studied that in relation to the Brown Brook? Well, capacity for example, to accept sewage effluent, treated sewage?

A. Yes, it was eliminated in the beginning as being too small.

Q. And were you part of that decision or did this occur before you became retained?

A. This decision was -- occurred before I was retained but I concur with the decision.

Q. I see. Do you know the elevation up here?

A. No, I'm not -- I'd have to go back to -- I know this is up to 600-and-some-feet here.

Q. ~~M-m h-m-m.~~ Would it sound accurate if I ask you if that is about 584 feet at the lake?

A. 584.

Q. Yes, give or take.

A. Let us say a total of 500. My recollection is from a water supply standpoint it was a critical point for the pressure determination.

Q. And that your level down here where you're talking about your wells is also a pond down here that you're excavating in this area (indicating)?

A. No, I'm not familiar with that.

Q. All right. This area down here is something like 300 feet?

A. 200-and-some.

Q. 280 to 300 or maybe less than that?

A. Less than that. Your saddle here is in the 300.

Q. Now, as to the topographical features, where does -- where is the natural drainage of this area that we have laid out as our water supply map?

A. Mainly made up of three major drainage areas, the Brown Brook for one, this drainage going off to the northeast and this shedding to the Plum Brook drainage area, Plum Brook, I guess, will be referred to as the East Branch of Plum Brook traverses the property at this point (indicating).

MR. DICKERSON: Could you mark that spot with the black --

THE WITNESS: How about blue?

MR. DICKERSON: Excuse me, the blue marker pen, and the letter "P" as in Plum, "B" as in Brook, I guess.

MR. DICKERSON: Plum Brook has been indicated on the Exhibit 4 with a blue marker pen.

THE WITNESS: You want me to mark --

I don't know whether I can really follow it on this print. Brown Brook -- well, we've used red so we better not use that.

BY MR. FLORENCE:

Q. Why don't you just use blue.

A. Want to use blue again?

Q. You want to call this Plum Brook?

A. Beyond there, I don't know, it falls off.

Q. Would you kindly also indicate the unnamed brook which traverses the area down near the wells and comes from this ridge or the east side of the ridge?

A. Generally that direction.

Q. All right. Would it be fair to say that it drops down to here through this area in a general -- a most general way?

A. General way, it starts out near the ridge as most brooks do and follows the contours, crossing the contours coming down.

MR. DICKERSON: The unnamed brook referred to is marked by a blue marker pen with no label on the eastern portion of Exhibit 4.

MR. FLORENCE: Can I put a question --

THE WITNESS: Want it marked unnamed?

(Walter McPhee)

290

MR. DICKERSON: Questionmark Brook.

MR. FLORENCE: Questionmark Brook
will be fine for me.

MR. DICKERSON: So we have a common
frame of reference.

Q. Now, do I understand your testimony, Mr. McPhee,
to say or to be that by the time you came upon the
scene, the location of the sewage disposal facility
had already been made, generally down near the
intersection or somewhere in the vicinity of the
intersection of Route 202 and Warren Street?

A. You say the location. The area assigned for
a utility area was defined on the map which was a
map below this.

Q. In point of fact, that's dated June of '72, is it
not, this map, indicating that this is the utility
area?

A. June '72 is the original map revised of
December '72, last revision.

MR. DICKERSON: Can we mark that
Exhibit No. 22 for identification?

MR. FLORENCE: We'll have that.

MR. DICKERSON: Exhibit No. 22 for

identification.

MR. FLORENCE: Shall I take the liberty of marking that for identification?

MR. DICKERSON: Just Ex. and number 22 on the lower right-hand corner. Now, would you lift it up so we can get the title?

Exhibit No. 22 for identification is entitled --

MR. FLORENCE: Comprehensive Master Plan.

MR. DICKERSON: --"Comprehensive Master Plan, Heritage Hills of Westchester" bearing the date of --

MR. FLORENCE: Well, original date of June '72, revised 10/2/72, 12/4/72.

MR. DICKERSON: Thank you.

(The document entitled "Comprehensive Master Plan" and so forth was marked for identification as Exhibit No. 22, this date.)

BY MR. FLORENCE:

Q. To your best knowledge, Mr. McPhee, from the moment of the layout, the very beginning of the laying out of the entire project, the utility service area .

which is to contain, as I understand, the sewage disposal plant --

A. Waste water treatment facilities.

Q. Waste water treatment facilities, it was located in this general area. Now, when I say "this general area," the general area noted on this Comprehensive Master Plan, June -- originally of June of '72?

A. When I was retained by Heritage, the assigned area was that area, yes.

Q. All right. Then to your knowledge, had it always been that area? Has there ever been any other area assigned?

A. I couldn't answer that now.

Q. All right. Could you distinguish for me if you will kindly, sir, either by soil or topographical feature the distinction between this utility service area through which the Brown Brook runs and the area not within the project but owned by the principals of this abutting portion serviced by the unnamed brook which we have -- that I indicate on the east side of this Comprehensive Master Plan?

A. I don't quite understand your question as far as distinguishing by soil.

Q. Soil, topographical feature or any other particular natural terrain feature.

A. Perhaps the -- some of the areas traversed by that brook are flatter than the present site. The soil generally is the same, the subsurface conditions a little higher sand and gravel in the one to the east than the area selected. That is about all.

Q. Wouldn't, in fact, the following of this stream into the ultimate -- oh, let me ask it this way rather: Are you familiar with the fact that it ultimately goes into the Croton River as part of the Muscote Reservoir system and which is owned by the City of New York?

A. Yes.

Q. And doesn't, in fact, that traverse the distance which this stream goes from, call it the dimensions of the property eastbound, traveling the further distance to get into that reservoir than, say, the Brown Brook does from where you have planned the deposit of the waste water treatment or waste water as it's treated into the Muscote in the other direction to the south?

A. From a distance standpoint I believe you are

right. From a time standpoint, no.

Q. All right. Now, let me ask you, sir, are you familiar with the 2,500 to 3,000 feet that the brook traverses to the -- Brown Brook traverses south of the ownership of the property of the principals in this application?

A. From the boundaries of the property and from studying maps, yes.

Q. All right. And can you tell me how many feet does that water drop in the Brown Brook between the time that it leaves the property of the applicants for the next 2,500 feet?

A. For the next 2,500 feet?

Q. From your study of maps.

A. To the lowest pond you're referring to?

Q. No, I'm referring to the next 2,500, about a half mile, and if you would like, I'll mark for identification the U. S. Geodetic Map if that would be of any use to you.

A. I have a print of it here I can refer to.

Q. All right. I didn't realize --

A. The 2,500 feet is roughly an inch and a quarter.

Q. I'm referring to down through right through here to

(Walter McPhee)

take you to the pond, what's the drop?

A. Well, the drop -- the drop on the U.S.G.S., the contours are 10 feet apart and they're greater than that. The -- are these 20-foot contours or 10-foot contours?

MR. DICKERSON: Mr. Florence, do you have a copy of the topographic map you'd be willing to part with?

THE WITNESS: The major contours are 50 and I think the minor ones are 10.

MR. FLORENCE: In our affirmative case I'll put it in now, Mr. Dickerson.

MR. DICKERSON: It will facilitate matters. Exhibit No. 23, if I may have it for a second --

MR. FLORENCE: Yes, let's mark it.

MR. BLASI: Is that the objectant's exhibit?

MR. DICKERSON: We have a universal numbering system for the exhibits in this proceeding.

Exhibit No. 23 is a copy of the 1960 Edition of the Croton Falls Quadrangle of the United States Geological Survey, scale 1 to 24,000, topo-

graphic map.

MR. BLASI: May I see it?

MR. DICKERSON: Will all parties stipulate to Exhibit 23 being received into evidence?

MR. BLASI: Is it a geodetic map, identified as that? Yes.

MR. DICKERSON: Exhibit 23 will be received in evidence. It's topographic map.

MR. BLASI: It's a topographic map, whatever it shows.

(A U.S.G.S. map, Croton Falls Quadrangle, was marked and received in evidence as Exhibit 23, this date.)

BY MR. FLORENCE:

Q. I'll ask the question: Could you get me, Mr. McPhee, kindly, from your reading of this map, Exhibit No. 23, what you observed to be the elevation differential between the area where the sewage treatment facility discharge area will be and the first pond to the south adjacent to Route 100, some 2,500 feet south of the property boundaries of the applicant?

A. From the point where the brook enters the culvert at Route 202 to the pond, the upper pond, below the Baptist Home on Route 100, there is an approximate fall of five feet.

Q. Now, that's based on the reading of this map and your observations, is that correct, of other -- other information?

A. This map, yes.

Q. All right. Now, would you give me --

A. I think it is actually higher. I believe it's the 236 mark here.

MR. DICKERSON: Speak up a little bit.

THE WITNESS: But I'd say five feet, order of magnitude.

Q. Would you give me a 2,500 foot traverse to the east side of Route 202 of the unnamed brook and the drop in the elevation there?

A. State the question. I think I know what he means but go ahead and restate it.

(The pending question was read by the reporter.)

THE WITNESS: Approximately five feet.

Q. Now, have you taken any studies with respect to the

area in the New York City reservoir where these two respective brooks deposit?

A. They both deposit into the Muscoot Reservoir of the Croton River system.

Q. I don't think you understood my question, Mr. McPhee. Let me try to reword it in a different way that may make some sense to you. I said, have you taken any studies or have any studies been conducted under your supervision which would indicate to you the purity or the nature of the water or the quality of the water in the -- in the reservoir in the area where these two brooks discharge their waters?

A. No.

Q. Well, would it be fair for me then to draw this conclusion from that answer, that you can't tell me then where in the Muscoot of those two locations there would be a better, safer deposit of the sewage effluent deposited? I mean that comes out of the treatment plant for this development?

A. Since I made no studies, I cannot give you an answer.

Q. O.K. Is there any significant difference or are

these streams approximately the same dimension in width and depth?

A. Which streams are we referring to?

Q. The Brown Brook and the unnamed brook to the -- that flows, I think, to the north and to the east.

A. I can't evaluate a stream as far as width is concerned. It depends upon the terrain. The drainage area tributary to the points on Questionmark Brook and the point on Brown Brook, there is a greater drainage area behind the point on Brown Brook.

Q. In other words, in terms of natural drainage, the Brown Brook carries off water from a greater geographical area in terms of storm -- natural storm drainage than the unnamed brook?

A. Natural rainfall runoff.

Q. And would it also follow then, sir, that there would be a greater amount of water in the brook at times given the same time in the Brown Brook than there would be in this named -- unnamed brook, given the hypothetical similar weather conditions, circumstance of rain, natural precipitation?

A. That's a difficult one to answer without

(Walter McPhee)

actually doing an analysis. When you say "at the same time," in that form, since this is shedding off in a very steep ridge, the concentration time to reach a point here is probably much shorter than to reach a point here (indicating) if you took a hypothetical storm which had its high intensity in the early part of the storm, a greater amount of water might possibly be passing this point at the same instant as this --

Q. Would it also follow that the subsiding from the flow would occur first here, that in an unnamed brook than in the Brown Brook and that as a consequence of that rule or hypothesis, that this would be in a flooded condition for a long period of time, a longer period of time than this brook under the hypothetical circumstances we've been inquiring into?

A. It would follow.

Q. Now, are you familiar with the terrain for the 2,500 feet south of Route 202 within the intersections of Route 100 and Route 202?

A. I think you asked that question before.

Q. I'm sorry, if I did.

A. And only from the standpoint of the borders of

(Walter McPhee)

the property and from the study of maps.

Q. Would the drop that's -- I'm going to call it gradient for the lack of a more professional word, but what I mean by that in that word is the total drop in the profile of the brook from one place to another, does that have any effect on the flow in the brook itself?

A. The flow in the brook now?

Q. That is the rate of flow, I'll start with that first.

A. The rate of flow?

Q. Yes.

A. At what time, during a rainfall or during the dry weather?

Q. As --

A. In both brooks for the same cross-section, if they had exactly the same --

Q. I'm not comparing them, I'm sorry. I misled you then. Let me go back to the hypothetical. Two hypothetical brooks, one flat, totally level, and the other one having a gradient drop substantially in excess of the flat one, which has the greater flow of water?

A. Again, I can't answer that in the sense of what is the drainage between -- you're saying which has the greater capacity?

Q. Same input.

A. Same input?

Q. Yes.

A. Both have the same flow of water, having the same input.

Q. All right. Which has the greater capacity for flow?

A. The one with the steeper gradient.

Q. In other words, we can say as a rule of physics that the stream that drops the most given two hypothetical sized streams, same sized, identical sized streams, the one that has the greatest drop has the greatest flow?

A. Again I have to qualify the answer because it is all depending -- you're talking capacity, I would say yes, not flow.

Q. All right.

A. Now, capacity is not --

Q. Shall I redirect my question in a more professional language?

A. Please do so and I can give you a more direct

answer.

Q. All right. The capacity of a stream which is flat is less than a stream, the same hypothetical stream with a drop, isn't that correct?

A. With the same cross-section of stream?

Q. Same cross-section of stream.

A. Yes.

Q. All right. The absorption quality of the surface around the stream may or may not affect the flow of the stream?

A. Not really during rainfall.

Q. Not during rainfall. Have you --

A. At peak flow --

MR. DICKERSON: Mr. McPhee, could you speak up a little bit so we could get this in the record?

THE WITNESS: I'm sorry, I'm facing the wrong direction. I can stand away from that. Not really as far as the peak flows are concerned.

Q. Now, let me give you the hypothetical. Have you studied the Brown Brook -- excuse me, I misspoke, the Plum Brook?

A. I have looked at Plum Brook. I have studied it

as far as reports and topography from maps.

Q. Now, isn't it an accurate statement that the Plum Brook drops some 60 feet between the -- its intersection with the south side of Route 202 near Brook Hill Road and its entry into the reservoir?

A. I would have to look at a map to tell you that. Got it? 300 --

MR. DICKERSON: Off the record.

(Discussion off the record.)

MR. DICKERSON: We'll go back on the record for your answer.

A. The brook from where it passes under Route 202, the 300-foot contour crosses approximately at that point and the reservoir surface elevation is shown as 200. Therefore, the fall would be approximately 100 feet, 200 to 300, 100 feet, yeah.

Q. Mr. McPhee, does -- what about the cross-section of the Plum Brook as it relates to the Brown Brook, for example; which is the larger and by how many times?

A. If you are referring to Plum Brook at the point where it passes under 202 as against Brown Brook where it passes under 202, oh, I would guess that it must be three to four times in cross-section.

Q. The Plum Brook being the larger?

A. Has the larger drainage basin.

Q. Yes, and have you studied it at peak flows following any particular natural precipitation?

A. I haven't, no.

Q. Are you in command of any studies that purport to do that?

A. The report includes some data on it.

Q. What part of your report, if you would refer me, please?

A. I'm not sure whether we have it in this report or not. No, it is not in this report, only the data on Brown Brook is in this report.

Q. Would it be fair to say that your reports do not have comparisons of the three streams, the unnamed, the Brown and the Plum Brook?

A. We have comparison of the two streams, the tributary to Plum Brook, the East Branch of Plum Brook and Brown Brook. We do not include the questionmark.

Q. Now, have you included in your studies the -- the Brooks as they -- the brooks as they are on your property or do you take the study of the properties

of the brook beyond your property, the property lines of the applicants?

A. In evaluating the brook as far as its capacity to be used for the receipt of renovated waste water, we take it only at the point within the property of the ownership of Heritage. Therefore, the drainage area behind that point.

Q. Is it not also sound engineering sense to find out where this is going to go when it leaves the property lines of Heritage?

A. Certainly.

Q. Is there any part of your study that indicates the capacity of these three different streambeds to handle that -- well, that flow or that capacity, that quantity of "treated waste water?"

A. Actually, the importance of what happens downstream only from the significance of use by people or by industry or for agricultural purposes is not too important. The amount of water at the point of discharge and the degree of treatment provided by the treatment facilities are the two important criteria to be considered. The possible -- the possible degradation of the stream below due to

sewage is important but in this case, the State of New York has no models on either of these brooks for an analysis of this.

Q. Well, that doesn't necessarily relieve you of responsibility as an upper river owner, does it?

A. The steeper the brook the more its capacity to reoxygenate.

Q. Right, and the better the capacity to reoxygenate, the more desirable it would be for your purposes?

A. Not in a case where the state indicates that the level of BOD in the treated effluent shall be not greater than 5 milligrams per liter and at the same time that the dissolved oxygen in the treated effluent be 7 parts per million or 7 milligrams per liter.

Q. Now, you're talking about --

A. Significance then disappears.

Q. As I understand it, you're talking about standards that are fixed by the State of New York, by the Division of Water Resources in certain classifications and standards that they relate to the quality and purity of water?

A. And memorandums from the Department of Environ-

mental Conservation in specific cases not covered by the standards.

Q. Aren't you -- you are --

MR. BLASI: Would you mind turning toward the Hearing Examiner?

MR. FLORENCE: Can you hear me, Mr. Dickerson?

MR. DICKERSON: For the record, I was awake.

BY MR. FLORENCE:

Q. Now, Mr. McPhee, isn't it true that the standards vary depending on the classification of the stream?

A. No.

Q. It's not true?

A. It's -- well, in this case the federal standards as published in the Federal Register which is now the law of the land requires that all sewage treatment, municipal treatment, receive secondary treatment and that this secondary treatment effluent be classified as not having more, and if I can misquote them -- I'm not sure of the exact numbers, more than 20 to 30 parts per million or milligrams per liter -- I went to school many years ago when we

talked in parts per million for milligrams per liter. They're both equivalent -- as far as the biological oxygen demand, approximately the same as far as suspended solids are concerned.

Q. Now --

A. Now, in the case where the streams require a greater degree of treatment for water quality --

Q. May I direct your attention to your answer. My question was with respect to the State of New York.

A. The State of New York has to accept the federal standards.

Q. Are you suggesting that they are different?

A. No, they have accepted them as far as I am concerned and I can be corrected.

Q. Are you familiar with the September 1973 Classifications?

A. I haven't read it.

Q. Are you familiar with the fact that these classifications vary according to stream category?

A. Classification of the stream varies but the degree of treatment does not except in the case where the water quality or the state water quality requires a higher degree of treatment which in this

case is what we are providing.

Q. Well, isn't it easier for a person who is a developer to be under the lesser stringent requirements than the greater for purposes of freedom of development of whatever --

A. A lesser, no. He has to meet the most stringent conditions set by the regulatory agency.

Q. That begs the question. I don't think you understood my question. It either begs the answer, one or the other. Isn't it true that the more treatment you have -- let's assume a minimum go, no-go as a minimum federal leve. Isn't it easier for you as a consulting engineer to have only the minimum standard and not have to meet any additional standards in the development of a plan for the waste water disposal; is that true or not true?

A. I don't have that freedom; no engineer has that freedom.

Q. Is it true?

A. Let me -- may I at this point --

Q. No, you may not.

A. -- clarify?

Q. Because it's cross-examination. You may do it on

redirect at the suggestion of your own counsel, Mr. McPhee, if I may. I don't mean to be curt about it.

A. All right, seemed to be a little more freedom here than in court cases so I didn't know how far you would carry it.

Q. Well, we didn't get there yet. Isn't it true that in order to make a fair engineering judgment of all of your alternatives, you have to know what the classifications are of the streams which are available either on or contiguous with the parcel for the purposes of deposit of waste water in a development of this size?

A. State the question again. I don't think I can give you a direct answer. Restate it and I might be able to.

Q. Something like motherhood. Isn't it true that --

A. With six children I'm against it.

Q. Isn't it true that in order to make a good engineering judgment of your alternatives for the receiving of waste water, waste water from your plant, that you know the capacities and qualities of all of the streams on the parcel available for the receipt of

such waters?

A. I can't answer your question because in this case, the point to be considered by the developer would be looked upon in the eyes of the regulatory agencies as being equivalent. The degree of treatment would have to be equivalent in all three points.

Q. All right. Now, are you familiar with the -- the sewage treatment facility at the Heritage Hills in Connecticut in Southbury?

A. I have looked it over. I haven't studied it in detail, no.

Q. Are you familiar with where the -- the place of the deposit of the waste water that has been treated by that plant?

A. My understanding after it goes through two small ponds, it is discharged directly into the river.

Q. Is it your understanding that within the river itself the sewage effluent is piped downstream away from the --

A. No, it's not my understanding that that occurs.

Q. Away from the community?

A. No.

Q. Now, do I understand your plans with respect to the deposit or discharge rather of waste water in the plant is that it is to follow a pipe to the southern limit of the southern property line of the applicant here?

A. It is actually to cross Route 202 and be discharged on the south side of 202 at the exit from the culvert under 202.

Q. Is that on your property or the property of the applicant?

A. The state -- state highway property.

Q. And do you know whether or not the state or any of its agents or designated personnel have agreed to receive that water from you in that plan?

A. No, it -- until the waste water facility report is approved we cannot receive the detailed plans to the degree of making applications nor can we make applications before the corporation is actually formed which is a condition of this hearing and the finalization of it. There is nobody that can sign the application for such an approval.

Q. Don't you provide in the -- in your study a plan showing a pipeline running right down it?

A. It's planned, sure.

Q. And that pipeline deposits your waste water or the waste water of your employer or the applicant here in someone else's land?

A. No, into waters of the State of New York.

Q. Which traverse your own land, that is the land of the applicant?

A. It originates on the land of the owner, traverses some adjacent land and we deposit it at that point.

Q. And how far is that? What distance are you talking about from the -- from the end of the discharge pipe to the --

MR. DICKERSON: For the record, gentlemen, is that Figure V of Exhibit 21?

THE WITNESS: That is Figure V of Exhibit --

MR. DICKERSON: 21.

THE WITNESS: I don't see the number on it.

MR. DICKERSON: 21.

THE WITNESS: 21. I would suggest a thousand to 1,200 feet before it enters the brook.

Q. And that is just on the side of the -- south side of the State Highway 202?

A. 202.

Q. And how far removed from State Highway 202 does that pipeline emit this waste water?

A. Oh, no, it's in the lands of the state highway.

Q. So it's within the right-of-way of the state highway?

A. Within the right-of-way.

Q. Now, isn't it sounder engineering practice to be able to control your own waste water where you have an ability to do so?

A. In what sense?

Q. To have it on your own land, to process it on your own property rather than to depend on it being re-oxygenated on someone else's land.

A. The waste water, the renovated waste water, when it leaves the property of Heritage Hills, will be in exactly the same condition as where it enters the creek, the brook, no changes. We'll already be near saturation of dissolved oxygen. Therefore, it could not receive any more dissolved oxygen. It would be worthless to send it down the creek and have it bubble over the creek again, no gain.

Q. Let me take you back to the premise of the question if I might. Don't you have better control over the waters of the State of New York or maybe your own waters if it's an unclassified and unprotected stream than -- on your own property than you do on another person's property?

A. I think I answered that question when you -- in the last instance.

Q. The subject of the sentence is the word "control." I don't think you did answer.

A. As I say, the control of the water and the quality of the water where it enters the pipe --

Q. I find it difficult to accept the same two words or those two words in the same thought.

A. What two words?

Q. "Quality" and "control" and I'm not talking about quality and control.

A. Quality and control run together.

Q. I'm talking about physical handling, management.

A. You can't control quality unless you manage it.

Q. Can you answer the question, Mr. McPhee?

A. The way you state it, no.

MR. DICKERSON: I think, gentlemen,

you're talking on two different levels. If I can interrupt for a moment, Mr. McPhee, 'I think it's a very simple approach that Mr. Florence is taking and it's where can you take charge of the water, on your land or somebody else's land; where do you have the power?

MR. FLORENCE: Let me pursue it a little further and then we can take a break.

MR. DICKERSON: Restate it.

THE WITNESS: If I can restate it, I stated above and if I can restate it, it may not be the exact terms. The quality of the waste water will be identical at the point where it enters the pipe on Heritage Hills to the point where it is discharged into Brown Brook, no change in quality.

MR. DICKERSON: I understand that.

MR. FLORENCE: That is irrelevant to the question and you don't understand the question.

MR. DICKERSON: Then I don't think you understand the question.

THE WITNESS: Then I don't understand the question.

Q. Let me restate it and see if you can understand the

question.

A. I think I know what you're driving at but control, you control it in the sense of quality; you control quality.

Q. I'll use a different word if I might and maybe that will help us talk about the same thing. Isn't it better -- aren't you -- no, aren't you better able to manage the product of your waste facility on your own land rather than on the land of somebody else where the water traverses someone else's property?

A. The answer is yes and that's exactly what we are doing.

Q. Well, let me suggest to you, sir, that you are not discharging your water on your own property. You're discharging it on property that belongs to the state contiguous with property which belongs to my client.

A. Not your client. I understand that that property there is part of the firemen, isn't it?

Q. You are somewhat accurate, they are somewhat parallel.

A. Parallel.

Q. They're --

A. It's called Fire Pond so I presumed that it was

part of the Volunteer Fire holdings.

Q. Some of my client's holdings were contributed to the firemen's holdings and I think that's part but I may not be accurate. But they are parallel properties. Let me ask you further then with respect to that: Is it fair to say that you haven't made any studies about the distribution of your waste water facility on the east side of the ridge beyond the golf course into the stream or the property that belongs to the applicants?

A. No, no study has been made for the east -- no, the east side. You were referring again to Question-mark Brook.

Q. Unnamed.

A. No, no study has been made. It was eliminated because of the small drainage area.

Q. Well, doesn't it follow, sir, that the smaller the drainage area, the less responsibility for natural precipitation and the larger ability of this to take a controlled outflow as you have stated you have here from your waste water facility?

A. You are going to have to restate that slowly because I don't understand what you're driving at.

MR. DICKERSON: Shall we take a break now?

MR. FLORENCE: Sure.

MR. DICKERSON: Ladies and gentlemen, let's take about a 10- to 15-minute break. I'd like to start at five after three.

(Whereupon, a short recess was taken.)

MR. DICKERSON: Ladies and gentlemen, we'll continue with the cross-examination of Mr. McPhee by Mr. Florence.

BY MR. FLORENCE:

Q. Mr. McPhee, hypothetically, I'm going to transpose the location of the sewage or the waste water treatment plant to the area outside of the DRD and into the area contiguous with the DRD which you refer to as the commercial property. On the east side of the ridge which is the eastern ridge of the parcel subject to this application, would it operate there, function that is?

A. Would it -- do you mean the treatment facility?

Q. The plant, yes.

A. The treatment facilities to meet the requirements of the memorandum from the State Department

of Environmental Conservation would operate on any one of the three possible sites: Questionmark Brook, Brown Brook or the East Branch of Plum Brook within the limits of the Heritage property.

Q. All right. But it would be true that you would require additional piping to get to the Plum Brook or could you place it in such a place that you could directly discharge into it at another location on the side of the DRD?

A. The -- I don't want to avoid answering your question but when you say piping, I think it has to be brought out that there would be disadvantages to going to either Questionmark Brook or Plum Brook over staying at Brown's Brook and the biggest disadvantage is one that the City of New York recognizes as they did in the design of the pumping station to serve Mt. Kisco. Mr. Kisco had its own sewage treatment plant that discharged into the reservoir system. It now takes that sewage and pumps it over the ridge into the Sawmill River trunk sewer and goes down to the Yonkers Plant. To protect the rivers out of the possible malfunction of a pumping station, they required that actual treatment

facilities be built adjacent to the pumping station. This would also be required in the case of any pumping station. Now, since the majority of the population in this development will be within the Brown Brook drainage basin, all of the flow is by gravity. Therefore the failure of a pumping station is eliminated.

Q. Well, isn't there some population that will be on either side of the stream?

A. Yes, but there would be disadvantages. Now, if we went to Questionmark, we would have to pump over the ridge, flow by gravity into a pumping station in Brown's Brook and repump it over the ridge to the treatment plant in question and vice versa if you went in the other direction. Take Questionmark which has got a small tributary population, pump it over to Brown's Brook, Brown's Brook into Plum Brook so there are disadvantages of going to the other two from that standpoint.

Also I believe and I really may be speaking out of turn, that from the City of New York's viewpoint, the further the discharge point is from the -- the further in the sense of time of

passage the discharge is from the reservoir, the more the possibility for additional treatment to take place due to nature's process in the stream.

Q. Well, would it not be true then that taking the time that it would flow into a lake or reservoir which is virtually level with the input that you would have a very slow time of discharge from that lake through a wetlands and into the northern part of the Croton River which discharges into the Muscoot Reservoir system as distinguished from the statements that have been made of the dropping of the Brown Brook through not only -- well, the drop in the Brown Brook?

A. State it again, please. You hesitated and I lost the train of thought.

Q. All right. Don't you have a much -- all right, I'm sorry. Don't you really have a much slower flow from the unnamed brook into the pond where the pond and the brook are virtually at the same elevation? I refer you to the unnamed brook, the pond on the eastern end of it which then seeps through a wetlands.

A. From a time standpoint, I would have to venture

a guess that the meandering streams, since as far back as I can see there is no defined stream except at extreme drought flow through the marshy area would consume a greater time than flowing down unnamed or Questionmark Brook through the pond. Therefore, since time is one of the elements to be considered in the nature -- natural processes of treatment --

Q. Don't you have it just reversed that the greater undefined area is over on the unnamed rather than --

A. No, no, in here (indicating).

MR. DICKERSON: Let's mark Exhibit 23 if we can.

MR. FLORENCE: It is.

MR. DICKERSON: It's labeled but we will mark it. We will just use three letters. I will mark Exhibit 23 with the East Branch of Plum Brook designated by the black letter "A", the stream known as Brown Brook appropriately with a black letter "B" and the -- what has been referred to as Questionmark Brook will be marked on Exhibit 23 with the letter "C."

THE WITNESS: Right. O.K. Makes it

easier. Now, venturing a guess --

Q. As I -- wait a minute.

A. Sorry.

Q. Let me try a question and then you can answer.

A. I don't think I completed my answer.

Q. All right, go ahead, finish your answer, sorry.

A. Yes, you asked the question that it would be a slower time of passage from "C" to the Croton River.

Q. Yes.

A. Than from "B" to this branch of the Muscote River. I would have to venture a guess without getting into details that actually the time to traverse through this very flat area of marshy area would be greater than through this same flat area. Both have about the same fall and the same distance.

Q. Let me ask you one question: Would it shock your sensibilities to discover that this area that you refer to as the marsh area on this geodetic survey map is an area also eligible for designed residential development?

A. I don't know why it would shock me. No, I have no reason to be shocked.

Q. All right. Bearing that potential consideration in

mind, also bearing in mind the general developability of the land that we refer to surrounding the traverse of this Brown Brook, comparing it with the wetlands up here, can you tell me where there will be the lesser effect on development of the discharge through the Brown Brook or through the unnamed tributary?

A. Well, without being -- I won't use that word but we are talking future --

Q. Yes.

A.-- which is beyond our control. Therefore, I cannot evaluate the future. I can only evaluate the present. Under the present conditions these are the conditions I have used. Now, what may happen to this land going off to the northeast is again something that you don't know about nor did I.

Q. Certainly.

A. So I don't think I can really weigh that question and give you an answer.

Q. Certainly you won't have any difficulty with the idea that nobody is permitted to certainly build in the marshland, which is a violation of the --

A. Wetlands.

Q. -- of the wetlands ordinances and regulations, correct?

A. No, would that hold for yourselves also?

Q. To the extent that it exists, yes.

A. Then both would be equal except your area looks greater on the map than the other one.

Q. Would you find that hypothetically a development of 500 acres as against the existence of this property up here would be something you wouldn't take into consideration in making your judgment and evaluation? In other words, you did not consider that protected?

A. No.

Q. Is it fair to say you did not?

A. Did not. I thought I said no, I did not.

Q. All right. It's also fair to say that nobody has taken any measurements or any -- made any study with relation to the time evaluation of the process, whether yours is an educated guess or a guess as to the time lapse between introduction of water into the unnamed stream into the Croton River as against introduction of water into the Brown Brook and into the Muscoot?

A. No.

Q. Now, are there any studies with relation to time between introduction of water or waste water into the tributary to the Plum Brook, into the Plum Brook and into the --

A. No studies were made because they were not considered necessary.

MR. FLORENCE: Well, I move to strike the last portion of your answer that begins with "because," Mr. McPhee, and I would ask you, were any studies whatsoever made on the Plum Brook or its tributaries?

A. As far as time of passage from the point of entry --

Q. Yes.

A. -- on the property? No studies were made.

Q. Were any studies made or are you aware of any studies of the area of the Muscoot Reservoir where the Plum Brook deposits into the Muscoot?

A. Not to my knowledge. I have no knowledge.

Q. On any of the -- on any of the areas of deposit, that is of the three streams, the Brown Brook into the Muscoot --

A. I have no knowledge of any studies.

Q. And the unnamed into the Croton River portion of the Muscoot.

A. "A," "B" and "C".

Q. In point of fact, isn't it so that you were simply given the location of the sewage treatment plant and told to work from that?

A. No.

Q. That's not true?

A. That's not true.

Q. Where else did you consider the location of that?

A. Plum Brook.

Q. And you have discarded that possibility?

A. We did.

Q. That is based on economic considerations, sir?

A. No. The reasons for eliminating Plumb Brook as we started the course of an hour ago, are basically two parameters: One, the actual quality of the water that may be there and the size of the drainage area tributary to the point of discharge. Both of these were considered. Plum Brook at this point on the East Branch of Plum Brook which is in the Heritage property and comes across here (indicating)

has a much smaller drainage area than Brown Brook at the point where it passes under 202. Therefore, Brown Brook plus.

The quality of the water presently in Brown Brook is better than the quality of the water presently at Plum Brook where it crosses under 202. Therefore, plus for Brown Brook, negative for Plum Brook, therefore elimination of Plum Brook.

Q. Let me add one more factor. Resistance of the downstream owner to the flooding of his lands on Brown Brook, concession that you may use this Plum Brook without opposition. Make any difference to you?

A. We considered and studied the effect of the discharge of the sewage onto the lower lands and as I think I stated in my presentation which is part of the testimony, we considered the flooding to be not significant.

Q. I --

A. The last --

Q. Does that mean that you --

A. No, at least there was no flooding to be considered in Plum Brook.

Q. Yeah.

A. Because of its gradient as against in here (indicating).

Q. All right, so there would be some flooding in Brown, around the Brown Brook but there would be none in the Plum Brook?

A. As stated in the testimony I gave earlier, the discharge of the treated effluent would have an insignificant effect on the hydraulics of the receiving stream. It has been calculated that if the 702,000 gallons per day of effluent were to be retained in the marshy area south of Route 202, and this is not possible since it would never be retained -- it would flow out as fast as it had flowed in -- it would increase the water level in the marsh by .017 feet or .2 inches.

Q. How many acres are involved in the area that you say you calculated to be affected in the marshy area south of Route 202?

A. The area of the marsh that was used in the calculation is 125 acres.

Q. I understand your testimony to be that you didn't study this area, is that correct, Mr. McPhee, the

area, this 125 acres?

A. We assumed that the 125 acres if under flood conditions would be flooded.

Q. Can you define your idea of a marsh? Maybe we'll get --

A. Define my idea of a marsh?

Q. Yeah.

A. A marsh is an area that, except in extreme drought, is substantially wet with water near the surface of the ground, on or near the surface.

Q. Now, in relation to the possibility of the flooding, and let's suggest that instead of taking the hypothesis of the daily treatment, let's take the peak treatment over a period of a shorter period of time, say several hours. Would you say that the discharge water would have nitrates or phosphates in them at all, any?

A. Would the discharge have phosphates and nitrates at what specific time?

Q. When discharged into this wet area south of Route 202.

A. All sewage contains phosphates and nitrates unless given a treatment to remove them to the nth degree.

Q. All right. Now, is it possible from your studies that any of that water that would be in this marsh area would seep into the reservoir that you have -- in this area where we've defined this 125 acres.

A. The water flows through the marsh and goes to the reservoir.

Q. Goes into the reservoir?

A. Yes.

Q. In other words, there would be some of the nitrates and phosphates would go in the reservoir?

A. That's right.

Q. How much would it cost to get them out?

A. We are taking the phosphates out which the State of New York considers as a trigger element for eutrophication of the reservoir.

Q. Now, let me ask you about the nitrates. How much would it cost to get them out?

A. I could not venture a guess.

Q. Have you made any provision in your report for payment for the -- let me get the language: Have you made any provision for the payment of any and all legal damages to persons or property resulting, say, from the addition of nitrates to a nitrate-

free water supply reservoir?

A. Have I personally made any provision?

Q. Anybody under your jurisdiction or authority?

MR. BLASI: I object to the question.
That's an improper question.

MR. FLORENCE: It's part of the hearing,
as I understand the notice.

MR. BLASI: There was testimony given
and there is an exhibit in evidence.

MR. FLORENCE: Don't testify, Mr.
Blasi.

MR. BLASI: I'm not testifying.

MR. DICKERSON: I'm going to sustain
the objection.

MR. FLORENCE: What?

MR. DICKERSON: I sustain his objec-
tion.

MR. BLASI: I object to it.

MR. FLORENCE: Is it my understanding
that there is -- I am not permitted to ask whether
or not there's any provision for --

MR. BLASI: No, he --

MR. FLORENCE: -- payment of --

MR. BLASI: He testified on direct to the engineering. There's been testimony by other witnesses as to the point that you have raised. You're asking once again now, we're shifting over to different people as to what they've testified.

MR. DICKERSON: I'll just make a comment on that ruling. I jumped ahead in giving the ruling but you haven't laid the basis for the question yet.

BY MR. FLORENCE:

Q. Mr. McPhee, have you made any provision in any of your studies for the payment of any and all legal damages to persons and property which may result from the introduction of nitrates and/or nitrates and phosphates --

A. No.

Q. -- to their water supply?

MR. BLASI: Object to the question. Don't answer the question until I get a chance to speak. I object to it. It's improper of this witness.

MR. DICKERSON: It's moot. He's already answered the question.

Q. Have you made any studies or have any studies been made under your direction as to the health, safety and welfare of the people of Somers and the adjacent community from the introduction of phosphates and/or nitrates in the water?

A. I don't believe -- I don't believe that is in my jurisdiction. That falls under the jurisdiction of the Department of Environmental Conservation and the Department of Health of Westchester County.

Q. Would it be fair for me to say then that you have not concerned yourself with that aspect of it?

A. I have to the degree of requesting from these agencies their requirements as far as the quality of the effluent of the treated renovated waste plant.

Q. What size pipe is it that you will discharge this water out of this sewage plant?

A. What is it, 18 inches?

Q. 18-inch pipe.

A. I believe so, is that correct? I -- as I say, we are not into detailed design to a point that I can give you that right now. It is probably on some drawings.

Q. But you don't know the answer?

A. I do not know the exact size. I would guess that it is greater than 12 inches.

Q. Now, I observed from the plan of your introduction that this pipe goes directly to the south side of Route 202 onto the state's property.

A. That is a generalized plan. It may follow a different route.

(Continued on page 338)

Q. In fact, it skips a pond that's --

A. That's not --

Q. That's misnamed, isn't it?

A. That's right.

Q. Your report is inaccurate in that respect?

A. In that respect.

Q. This is the pond that is held jointly or in part by --

A. I don't know the name of the pond. It is misnamed; it is not the Fire Pond.

Q. Saia and Port?

A. Question Mark Pond.

Q. Yes. Now, is there any particular reason why you decided to take a pipe from your plant and discharge it beyond your property lines rather than to place the discharge effluent into the stream which runs along next to this plant, the Brown Brook?

A. I find -- if I understand your question, is that why did we follow this route instead of going directly into the stream?

Q. Well, it's part of what I said. It's something like what I said.

A. Mainly to avoid the discharge into the pond.

Q. Can you explain the purpose of avoiding the discharge into the pond that I call Port and Saia?

A. Mainly again from the possible viewpoint of objections from these owners, not from the quality of the water but from the psychological effects of having the water discharged.

MR. DICKERSON: May I interrupt for a second? I take it you gentlemen are referring to Figure V of Exhibit 21?

THE WITNESS: Figure V, yes, I go back to V.

Q. Figure V, it's a misnamed pond?

A. This is not the Fire Pond.

MR. DICKERSON: This I want to get on the record. Fire Pond is a body of water adjacent to Warren Street on that figure.

MRS. SAIA: Saia and Port.

MR. FLORENCE: Saia and Port.

A VOICE: Belongs to the Port family and the Saia family.

MR. DICKERSON: The pond is labelled Fire Pond on the figure, and the pond is not known locally as the Fire Pond but as the pond belonging to Port

and Saia families?

THE WITNESS: Fire Pond is the next pond below.

MR. DICKERSON: And then for the record, the pond known as the Fire Pond is downstream of that pond?

THE WITNESS: On the other side of the road.

MR. DICKERSON: And south of the Somers Road or Route 202?

THE WITNESS: 202.

MR. DICKERSON: All right, thank you.

BY MR. FLORENCE:

Q. Have you studied the Fire Pond?

A. Have we studied the Fire Pond? Yes, we have.

Q. And what is the result of that study; what do you know about that pond?

A. We have studied Brown Brook. I'm speaking we, in terms of Heritage and us.

Q. I'm speaking specifically of Fire Pond if you would limit your answer to that.

A. The Brown Brook has been studied as far as its --

Q. May I again interrupt? Please try to restrict

yourself --

A. No, I think in this case, I have to answer that in a study the study included, if I can use this map over here, the study of the brook in this vicinity, a study of the pond directly -- the outlet of the pond, a study of the outlet of Brown's Brook where it passes under Route 100 down here and a study of the pond just above the outlet passing under 100.

Q. And what did you find significantly different if at all between the water that you studied at - which we referred to as the Firemen's Pond and the water you studied in the pond owned by Port and Saia?

A. A degradation of the water as it continued from the lands of the -- of Heritage Hills to the point where it entered the lands of your client and with some recovery through the lands of your client.

Q. I didn't understand the answer. Maybe you would want to --

A. A degradation of the stream from where it passed through the lands of Heritage Hills of Westchester to the point where it exited from the Fire Pond with some recovery in the degradation as it continued through the lands of your client but still in a poor-

er quality when it left your client's property.

Q. I'm not so certain that that answers my question. Let me move to strike that answer as given and try again.

A. You asked me if I studied it.

Q. I asked you if you studied.

A. You asked me if I studied the pond; you asked me the question and I answered the question as far as the pond, the Fire Pond.

Q. You can't be the judge, you can't be both; you have to be one or the other.

MR. BLASI: I trust it's responsive.

MR. FLORENCE: Your trust is misplaced.

Let me try again.

MR. BLASI: Well, I'm asking the Examiner to rule on it.

Q. Explain what you observed in comparing the water in the Port-Saia pond with the Firemen's Pond; please try to direct yourself to that answer.

A. A degradation of that water as it went through that pond and through the Firemen's Pond.

Q. You're referring to the water all the time. Have you made any studies other than the water itself?

A. Studies were made of the actually the bioflora in the stream.

Q. Are you familiar with those studies?

A. I am familiar.

Q. And did they produce for you any meaningful difference between the two?

A. Yes, definitely.

Q. Explain them.

A. I would not go swimming in Fire Pond. I would not go swimming in your client's pond. It is below the standards of Westchester County on occasion for bathing waters.

Q. You may assume that I represent Port-Saia; I don't.

A. No, I'm talking about the property, the Kipp property.

Q. I'm referring to Port and Saia. I move to strike your answer and ask if you could direct yourself to the comparison of the Firemen's Pond with the Port and Saia Pond.

A. All right, I would not go swimming in the Firemen's Pond.

Q. How do you base that on an engineering statement?

A. The coliform count on the exit from the Fire

Pond on two occasions was in excess of 4800 -- is that your level for means of measuring bathing water quality? And when it's high and I am going to memory, as 16,000 and actually on the other days averaged somewhere in the vicinity of 2,000. The water quality also contained phosphates at the level of rate of two and a half milligrams per liter. Our effluent will contain a half a part or half a milligram per liter.

Q. Now, have you taken studies of the water in the Port-Saia Pond?

A. Yes.

Q. And how does that relate to the Firemen's Pond?

A. It is a better quality.

Q. So you have decided to skip the Port-Saia Pond and deposit your waste water into the Firemen's Pond?

A. Our waste water will actually decrease the coliform count and the phosphate count level in the Fire Pond. The Federal rules and regulations, I presume the Federal or the State will follow the same rules, requiring that you have no more than 200 most probable number of coliforms per 100 milliliters after disinfection. All of these points that were

tested were in the order of magnitude of a thousand. Our effluent will have on the average not more than a half a part per million of phosphates measured as P, not to exceed one at any one time. The water at all of these streams starting at the Port-Saia Pond through the ponds further down have levels in excess of two and a half parts per million which it amazes me there is no algae bloom.

Q. O. K. In point of fact, there will be if we add nitrates and phosphates in the waste water discharge?

A. We are going to actually dilute the phosphate content, of the stream. We will increase its nitrate content.

Q. Now, is this the only study that you are doing in the Town of Somers?

A. I am also consultant for Primrose Farms if that's what you refer to.

Q. Yes, and in reference to that, aren't you planning and preparing sewage waste water deposit into the Plum Brook?

A. There is a tentative site location which has been approved by the Town Board.

Q. Into the Plum Brook?

A. Into the Plum Brook as the only drainage course, major drainage course through their property and actually it's on a small tributary of the Plum Brook.

Q. To lead into the Plum Brook to go into the Muscoot?

A. Flows downhill; that's the only way we can go unless we want to pump.

Q. Unless you pump and if you pump and the pump breaks down?

A. It will go into Plum.

Q. The failure goes back where, back to the applicant's property, doesn't it?

A. No.

Q. The failure does not go back to the applicant's property. Again, water --

A. Well, water runs downhill. You told me that before in the law of physics. The steeper the gradient the more it will run in that direction since the gradient has to go to Plum Brook; it will go to Plum Brook untreated unless the City of New York, which it is their standard requirement, makes us provide sand filters around the station for this possible contingency.

Q. Now, as far as the number of persons which you es-

timate to be the population of this village, the Heritage --

A. 5580.

Q. That's based on what minimum age?

A. 18.

Q. And what adult age?

A. I don't think there's -- I think there's a 40 for one of the adults.

Q. Yeah. Would that be here and 50 over there?

A. I believe it's 50 over there.

Q. And as far as you are -- as far as your experience indicates there shouldn't be any differential in the size of the family?

A. No differential, this has been accepted by the State of New York and by Westchester County and by the City of New York.

Q. Do you have a judgment in that respect?

A. I don't have it in writing but we have had numerous meetings.

Q. I meant in your own?

A. Do I have a judgment?

Q. Yes.

A. Yes. I looked at the data, the actual analytical

data that was used to come up with this and it's actually less than 1.8. It ranged from 1.74 to -- you haven't put it in evidence but -- no.

A. This was a study, it's not in evidence, but I presume it will be submitted if it's your intention, Peter.

MR. BLASI: Yes, sir.

A. (Continuing) This is to John DeGrace, Representative of Heritage Hills, Don Turner of Heritage Village, population.

Q. Let me save you some time. Rather than read that thing unresponsive to any question and have me strike it out of the testimony, I'm asking if you've studied anything on your own and you say you have.

A. I have studied this report.

Q. And based on your -- your detailed study, what do you find with respect to the population which you tell us is going to be the average size of this condominium community?

A. The population at 1.8 will be satisfactory. The design of 100 gallons per capita per sewage contribution will be excessive.

Q. Now, isn't it also true that it is your present in-

tention to make a map and to incorporate in that map a portion of the community not part of this designed residential development?

A. You are talking the property to the north.

Q. I think I am but I'm not sure; you tell me.

A. I don't recall what is the name of that -- Greenbriars?

Q. That's to the east.

A. Greenbriars, that's to the north, north, northeast.

Q. And that's been -- that's to be included as you understand it, as part of --

A. That will be included and has been included in the waste water facilities report which has been reviewed.

Q. And is there also -- that will also add to the total amount or consumption or process of waste water?

A. Yes, a hundred.

Q. In other words, your waste water --

A. 100,000 gallons per day, I think, has been what I stated in my testimony this morning and is also included in the reports.

Q. What's the capacity of the brook, the Brown Brook,

over a period of an hour?

A. Capacity? Again --

Q. Capacity.

A. Again we're getting onto words like "control."

Q. You don't like "Capacity?"

A. Well, "capacity," the capacity of the brook is zero theoretically when it has no flow in it except from a hydraulic capacity which means it has the same capacity as it would have under a high rainfall.

Q. What would the peak flow absent rainfall, according to your report, include?

A. There are no continuous records on Brown Brook so that can not be answered. I don't know what the average flow in Brown Brook is. I do not know what the peak is. I can calculate it.

Q. I don't think you understood my question. My question was relating not to the present flow. What is the flow proposed, maximum peak flow for your peak hour as you would intend to deposit this waste water? I'm talking about waste water flow?

A. One million seven hundred and some thousand gallons per day rate.

Q. That's a rate, but you have a peak, don't you?

A. That's the peak; that's the peak.

Q. All right, and over what period of time will you have this peak, an hour during a particular time of the day?

A. I would say this.

Q. Or two different hours?

A. This peak may occur approximately within the order of magnitude of the peak twice a day. Normal diurnal variations of living gives you a peak in the morning and a peak in the evening.

Q. And in addition to that, there will be rainwater and other precipitation deposited into this brook as well?

A. Rain water and precipitation are the same.

Q. Are they? What about snow, melting?

A. That's rain, precipitation, same thing.

Q. You mean anything comes out of the heavens and gets wet?

A. Precipitation, stick to it.

Q. Do you have any estimate of the result of precipitation on the Brown Brook in addition to the discharge of the waste water?

A. This is not my area. Leonard Bibbo will testify

as to the rainfall, anticipated flooding, and so forth and I can not answer that.

Q. Is it fair then to say you don't --

A. We have checked it in the early stages. I could dig out the calculation. Again I believe it may be in the waste water facility report.

Q. And -- well, assuming -- you have one?

A. A rainfall intensity of two inches per hour, a runoff coefficient of three tenths for 1600 acres tributary at that -- under those assumptions, the runoff would be 960 cubic feet per second at the point where it passes under Route 202.

Q. Do you have an estimate -- do you have figures for a 25-year or 10-year maximum rainfall? You could answer that question yes or no, I assume.

A. I don't have the figures and I don't know whether the Weather Bureau does or not because there are no weather stations in this area.

Q. Do you know, to your knowledge, did you plan in your report for a 10-, 25-year or greater period of time maximum precipitation?

A. I would say that two inches per hour falls around the 25.

Q. That's your guess on that?

A. Yes, but if we want to get into a dissertation on that I can take an hour and confuse you because when you talk about 25 --

Q. Any time you say "because" I start objecting.

A. All right, but you've asked the question which I think needs clarification.

Q. Then your counsel will have to do it.

A. And I'm an expert on it. There is no such thing as a 25-year storm.

Q. One in 25 years, no hypothetical concept of that?

A. There is --

MR. DICKERSON: Gentlemen, may I suggest that that particular discussion be deferred until later?

A. Well, he raised the question. I think it should be clarified. I don't know.

MR. DICKERSON: Your point is well taken. I know what he's getting at and --

THE WITNESS: Yes.

MR. DICKERSON: And the hydrology aspects.

THE WITNESS: I presume you under-

stand, you're the one who's going to judge so I won't go into any details.

MR. DICKERSON: The hydrology class can start after the hearing.

THE WITNESS: I understand he has an engineering degree as well as a law degree.

MR. DICKERSON: We're familiar with this.

MR. FLORENCE: I profess ignorance in both aspects.

THE WITNESS: You're doing pretty well in one end.

Q. What provisions have you made for the protection of the wetlands affected by the waste water system and the location of the waste water treatment plant and the location of the pipe discharging then?

A. Provisions?

Q. Yes.

A. I have met the requirements of the State of New York, the Department of Environmental Conservation, the Westchester County Health Department and the New York City Department of Water Resources.

MR. DICKERSON: You want to take an

interruption for a minute? Let's take about a five- to six-minute break and relax.

(Whereupon, a short recess was taken.)

MR. DICKERSON: O.K. Ladies and gentlemen, we will proceed.

Mr. Florence.

BY MR. FLORENCE:

Q. As I understood a portion of your report, Mr. McPhee, you indicated the possibility of consideration of using the waste water to water the golf course?

A. In, I believe December, the first report written included that. It was deleted because of problems with the DEC as far as the standard that will be used for such application. It will be considered as soon as we can work out the rules and regulations that will apply.

Q. Assuming for a moment hypothetically that you're "successful" and again are able to use that --

A. No reason why it shouldn't be used.

Q. Let's say that you are successful, that's an area which is again draining -- part of the drainage area that goes to the Brown Brook, am I correct, in that?

In other words, here's the golf course.

A. I think it's shown on this other map as well.

Q. Oh, is it? All right.

A. You have the golf course here, nine-hole, and then you have part of your golf course on this side of the ridge here.

Q. Would it be fair to say that whatever drains from this, the two portions of these two golf courses would drain in the basin serviced by the Brown Brook?

A. Yes, yes. The -- actually the quantity of water was produced at full development, if you were to do a first class job of irrigation --

Q. That's a small "if."

A. If -- it's always an "if". A first class job which means irrigation of approximately 1.4 to 1.5 inches of water per week on your fairways and on your greens and on your tees, we might be able to irrigate 18 holes, might.

Q. Would there be any --

A. Depending upon the width of the fairways and the yardage of the course.

Q. Would there be any runoff with the storm water of whatever you were depositing upon the golf course

including but not limited to the waste water and any fertilizers that might be used?

A. I'm not an agronomist. I can't answer that question as far as what is going to be left. The nitrates and the phosphates and the potash and so forth that may be present in the stream when the transpiration and evaporation and percolation is all finished.

Q. What provision, if anything, have you -- if any, have you made in your report for the possibility that nutrients from the golf course would be drained off by natural precipitation and into the Brown Brook?

MR. BLASI: I must object to that question because Mr. McPhee very clearly made it very clear that at the moment if I understand it, there is no plan to use the effluent.

MR. FLORENCE: I asked him simply if he made any provision in his plan. I suppose he knew what's in his plan and he could answer the question yes or no.

A. My responsibility is not the golf course.

Q. Oh, I see. So would it be fair then to say there

is no responsibility -- no provision in your plan?

A. I can't answer that. Somebody from Heritage Hills who is responsible for the design and operation of the golf course may be able to answer it.

MR. FLORENCE: I'll move to strike everything after the first three words, "I can't answer that."

MR. DICKERSON: We never strike but your comment is noted.

Q. With relation -- directing your attention, sir, to the relocation of the Brown Brook, do you -- have you made provision for that in your waste water facilities report?

A. No.

Q. Do you have any further --

A. It is shown as being relocated if that is what you mean by making --

Q. Where is the relocation to occur?

A. Relocation would be to the west of its present position.

Q. Well, that's only 650 --

A. Could I show you on the map?

Q. Yes, it's 650 feet, as I recall, the notice was 650

feet as distinguished from the full traverse of the Brown Brook.

A. The treatment plant, of course, occupies an area here.

MR. DICKERSON: Would you mark it please?

THE WITNESS: Part of the treatment plant actually crosses the present route of the brook. Therefore, the brook will be relocated. That's --

Q. Now, have you made any provision for siltation downstream during the relocation process?

A. Not under my contract. That is under Leonard Bibbo's contract.

Q. Would it be fair to say that you have not then, that you personally --

A. It's not under my contract. I think the answer stands by itself.

MR. BLASI: He's answered the question.

Q. Now, do you know the definition -- have you submitted to any of the regulatory agencies the confines or the definition of the proposed waste water district; that is, the whole area that you intend to

service with this sewage treatment plant?

A. I haven't because, again, it is not part of my contract. That, I understand that the district has been formed in the town there for its metes and bounds description which has been set on paper and approved.

Q. Is it different from -- as far as your understanding, from the water supply district?

A. Since I didn't do it, I can't answer the question.

MR. BLASI: You want the answer? I'll refer you to the order.

MR. FLORENCE: Simply asking the question.

MR. BLASI: The answer is they're both the same.

Q. Do you know whether or not water is to be supplied to some district or some organization or group of persons other than for property owned by the applicant?

A. You say is to be supplied or can be supplied?

Q. Yes.

A. You mean is to be supplied under the present

plans?

Q. Yes.

A. No.

Q. All right. Are you familiar with the facilities of the Amawalk treatment plant and the service of the supply of fresh water to the towns in the locality?

A. I think I have to answer yes, since I testified to that this morning.

Q. All right, and you're familiar --

A. Or early this afternoon.

Q. -- with the fact that portions of the Town of Somers do, in fact, receive water supply from it?

A. Small portions of the Town of Yorktown does receive water supply from it, a very small district just west of the Amawalk Dam.

Q. And have you explored in your study the possibility of extending that water to this development?

A. We looked into it. The actual linear foot of laying mains and so forth was such that it was not from an engineering standpoint feasible.

Q. Are you familiar with the existing population of the Town of Somers or the number of one-family residences which presently exist within this

community?

A. No.

Q. Not at all?

A. I live in the Town of Ossining, I don't live in the Town of Somers.

Q. I figured that. Are you familiar with, in a general sense, the proportion of new homes that this project intends to create --

A. No.

MR. FLORENCE: -- in relation to the existing population? I haven't any further questions at this time. O.K. Thank you.

THE WITNESS: Can I sit down?

MR. DICKERSON: Please do.

BY MR. FLORENCE:

Q. All right, let me ask one other question: What happens when this plant breaks down?

A. Well, what do you mean by "breaks down," physical malfunction of equipment, a breakdown in process?

Q. A breakdown in process for -- you can sit down.

A. The process as I indicated is made up of seven steps. If you got a breakdown of your biological phase of it where your efficiency of removal of your

carbonaceous and nitrogenous BOD was decreased, it would put a higher load on the other portions of the plant. The overall efficiency of the plant would decrease.

Q. Is the plant intended as a -- to be created on this property -- is there intended to be created on this property the same kind of a plant which is in existence at the Southbury plant location?

A. State it again. I don't know whether you used the word "similar" or equal.

Q. Well, is it similar, I'll use that word.

A. It is similar in the sense of the process, the extended aeration process which provides for the removal of carbonaceous as well as nitrogenous BOD.

Q. Are you familiar with the breakdown problems in the Southbury plant where there's raw sewage in the river?

A. I know nothing about that.

Q. You don't know anything about that possibility or that likelihood of that fact?

A. If you were referring to the growth of duckweed on one of the ponds to the point that the duckweed has got into the stream --

Q. No, I'm referring to raw sewage.

A. How do we measure raw sewage?

Q. One of the reasons, I think -- instead of my answering your questions, I think I'm the lawyer that should ask the questions.

MR. DICKERSON: O.K., gentlemen, let's get to the point.

Q. One of the indices -- you give me the indices of the existence of raw sewage in addition to coliform.

A. Coliforms would probably be your only real measure of raw sewage.

Q. O.K. Let's go --

A. But it does not mean raw sewage in the sense that coliforms might be from any other source. You might have some measure that would show up.

Q. Let's say that the plant breaks down so that there's an existence of a high count of coliform. Would there be any place on the property owned by the applicant where that would exist or would that be on neighbors' property?

A. Actually, the deep pond on the -- now, wait a minute, go back. You said the applicant?

Q. Yes.

A. There would -- as far as coliforms are concerned, I am not concerned about the discharge of coliform for the simple reason the control of coliforms is by chlorination-disinfection.

Q. So that if --

A. If we can apply enough chlorine and hold it for 20 minutes, 20 to 30 minutes, we will burn sufficient coliform organisms to meet the standard of the 200 level.

Q. What do we do to the odor?

A. Odor?

Q. In that breakdown.

A. Odor would only occur if the process went from an aerobic process to an anaerobic process.

Q. And then it would stink?

A. If -- no, no, I disagree with you. I don't know, we have people from -- here either from Somers, you have a process in Yorktown which on occasion goes anaerobic.

Q. And stinks.

A VOICE: And stinks.

A. All right, it stinks. Odor is the most difficult thing in the world to measure.

Q. But who would get that?

A. Standard methods for measuring odor "stinks" is by taking five or four people and each one registering it and registering his level of what the smell is. But with a head cold it doesn't smell. If you're accustomed to working on a farm where you have a manure pile, it isn't a bad smell, all right? I'm saying "stink" is too broad a term.

MR. DICKERSON: All right, gentlemen.

Q. Isn't it true, Mr. McPhee, that the first ones affected by the breakdown wouldn't be the applicant and the owners and operators of the plant but would be --

A. We don't have -- we do not have the type of process that lends itself to generation of stinks as far as the process is concerned. It's an aerobic process. Stinks are associated with the anaerobic destruction of the organic material where your generation of hydrogen sulfide and other odors which you call stinks takes place.

Q. Would there be closer management of the sewage or the waste water facility if the discharge were under the property of the applicant on the unnamed stream

rather than if he's depositing it in neighboring streams, on neighboring property?

A. No.

Q. You don't think that --

MR. BLASI: He's answered the question.

A. I answered the question.

MR. BLASI: He's answered the question.

Q. I've asked him about it.

A. I've answered. Now, I've just given him a simple answer.

MR. FLORENCE: I don't think he answered.

MR. BLASI: You don't think? He answered it.

BY MR. FLORENCE:

Q. You don't think that human nature being what it is that there would be a little more care and a higher standard of maintenance if the plant and the discharge were on the property of the applicant?

A. I am not a student of psychology.

MR. BLASI: Don't answer.

Q. So you wouldn't, therefore, be able to answer that question, is that correct?

MR. BLASI: I direct you not to answer it because I'm going to interpose an objection. It's an improper question.

MR. FLORENCE: I ask that the question stand.

MR. DICKERSON: The answer -- the objection is moot. He's already answered the question.

THE WITNESS: No, I haven't. No, all I said I was not a student of human psychology.

MR. DICKERSON: O.K. I'll sustain the objection and let it go at that.

MR. BLASI: All right.

MR. FLORENCE: I don't have any further questions at this time. Thank you.

THE WITNESS: That was 15 minutes ago.

MR. FLORENCE: I said at this time.

MR. BLASI: Somebody else want to cross-examine?

MR. DICKERSON: Mr. Vazzana, how long?

MR. VAZZANA: Well, Mr. Dickerson, I'm going to make mine brief but there will be my associates who will continue with this.

MR. DICKERSON: Then let's use up the
appointed time.

CROSS-EXAMINATION
BY MR. VAZZANA:

Q. Mr. McPhee, did I understand you to say there are
three wells, that there were three wells?

MR. FLORENCE: Three wells.

A. There were three test wells.

Q. Three test wells?

A. In the area where we planned to develop the
water supply, yes.

Q. And of these three test wells, how many do you
intend to use?

A. We may not use any of the test wells. We may
develop two additional wells in that vicinity after
further exploration.

Q. Now, how many of these three wells did you test?

A. All three of them simultaneously for 60 hours.

Q. I show you this report, Mr. McPhee, I believe it's
attached to one of the exhibits.

MR. DICKERSON: I believe the --

MR. VAZZANA: Lauman Laboratories,
Incorporated.

MR. DICKERSON: Is that referring to the chemical analysis of Well No. 3?

THE WITNESS: That's right.

MR. VAZZANA: Yes, I believe so.

MR. DICKERSON: That is Exhibit 6.

MR. VAZZANA: Exhibit -- I refer to Exhibit 6.

THE WITNESS: Well, I stand on my answer before.

BY MR. VAZZANA:

Q. No, no, may I finish the question please, because I had not. That refers to a test of one well, is that right, that's Well No. 3?

A. That refers to a test of one well, No. 3.

Q. No other well?

A. No other wells.

Q. I'm speaking about this report.

A. Can I elaborate on my answer?

Q. Yes, you may if you wish.

A. We are tapping an aquifer made up of sand and gravel and we are taking three wells out of the same aquifer. Therefore, it is normally accepted that one sample of the aquifer is sufficient to determine

the quality of the water in the aquifer.

Q. So you believe that by testing Well No. --

A. This is representative of all three.

Q -- 3 would be representative of the entire three, is that correct?

A. That is correct.

Q. Mr. McPhee, do you know that in the area of these wells that there have been dumpings?

A. Dumping what? No, I don't.

Q. Refuse?

A. No, not to my knowledge.

Q. Did you visit the site?

A. I visited the site several months ago.

Q. Did you know at any time that there had been dumping by residents close to those wells?

A. Not to my knowledge.

Q. That area is now fenced off, isn't it, close to the wells?

A. The wells cover an area of approximately several hundred feet from one to the other two.

Q. And there is a fence?

A. I believe there's a fence along the highway if I'm not mistaken.

Q. Do you know why that fence was put there?

A. I presume it was on the property line of the owner of the property.

Q. Did you know that these -- this fence was put there so as to prevent individuals from coming in from the outside and dumping on the premises?

A. No, I did not.

Q. So you don't know whether or not, am I correct -- understand me and correct me if I'm wrong-- that at some period of time whether legally or otherwise, the residents in the area had been dumping refuse close to these wells, to these wells?

A. What do you mean by refuse?

Q. Those things which, of course, would normally go to a sanitary landfill.

A. Organic material, garbage?

Q. That is correct. Did you know that?

A. No, I didn't. I stated that before.

Q. When you made your tests, did you look for any of this organic material that we speak of or any of the so-called -- what I call refuse?

A. We did not run a coliform analysis on the well. The state did not request it.

Q. Whether the state requested this or not, you made no such report?

A. Didn't make one.

Q. Now, these three wells that you tested, are those three wells, you say you may not put them all in operation, is that correct?

A. State it again.

Q. You may not put the entire three wells in operation?

A. The three wells that were constructed during the test period were put in operation and pumped simultaneously for 60 hours.

Q. For 60 hours. And would I be correct in stating that those three wells would, from your analysis or from a report on your analysis, would correspond to the exhibit, Exhibit 6?

A. I have to qualify my statement on this since this is -- as I was questioned before, the laboratory report prepared by the drilling company. Therefore, I have no personal control over the preparation of this report.

Q. That's fair enough. Now, these wells now, there will be a golf course, is that right?

A. There will be 27 holes of golf, one 9 and one 18.

Q. And these wells, will they supply water to the golf course?

A. There is insufficient water to support a golf course.

Q. Where is this water going to come from for the golf course?

A. At the present time the only place it can come from is rainfall.

Q. Pardon?

A. From rainfall.

Q. From rain?

A. If we can work out the conditions with the State of New York as far as the use of the renovated waste water it will be used for irrigation of the golf course.

Q. But at the moment you have no tentative or at least no concrete provisions?

A. No.

Q. Insofar as the use of the wells?

A. The present provisions as stated in one of the appendices or addendums to the state's rules are such that to use renovated waste water you would have to fence in the area to keep people off. You can't do that with a golf course.

Q. Now, in connection with the condominium and speaking solely of a condominium, there is a commercial development as well as that, isn't that so?

A. There has been an area assigned for commercial development to my knowledge, which is beyond the 830-some acres and lies mainly in the area where the wells would be and a portion around Brown Brook and possibly I'd say an area assigned, but whether it is developed or not, I would say would be up to the owner. We have in our design of the facilities included a demand for water from these areas of 44,000 gallons per day.

Q. Is this commercial development going to be operated by one of the so-called corporations?

A. I can't answer that. That's beyond me.

Q. I know.

A. I'm only the consulting engineer.

Q. I know, I realize. But have you taken into account when we're speaking of the wells, the supply of water to the so-called commercial development?

A. Yes, I just stated that we had included in our demand 44,000 gallons per day for this possible commercial development.

Q. And that commercial development is 77 acres, isn't it, or approximately?

A. I think it may be more than that; I'm not sure. It's the difference between 900-and-some acres and 830-some.

Q. Well, we won't quarrel about that; we will say 8.. at least 77 acres?

A. I couldn't swear whether it was 50 acres.

Q. Well, approximately 77.

A. I can't because I have no knowledge.

Q. O. K. Will you be supplying any other area other than your own, other than Heritage Hills?

MR. BLASI: What are we talking about, water or sewer?

Q. Water, we're talking about water.

A. Water. The only qualification of that would be the statement made in the presentation I believe, and Mr. McGann also stated in his presentation that if, in areas where we are drawing water from an aquifer, some wells, local wells, are affected by the withdrawal of water from that aquifer, and they should fail and it is the most economical solution to extend the water company to ~~save~~ these people,

then these people would be included, but this would be very little.

Q. This would be outside the --

A. Counting on where these failures take place, they would have to be outside of the lands of Heritage.

Q. I see. Now, in your statement you did say that if, after the wells are completed and tested over a longer period of time, the safe yield should be less than that as now established, that is correct.

A. That is my statement.

Q. Now --

A. There's always that possibility. We have to consider it.

Q. Now, and your additional wells will be tested either on the present site or other lands, is that correct?

A. That's right.

Q. And if they should be inadequate then plans will be developed to tap the New York City Aqueduct, is that right?

A. Yes.

Q. Would I be fair in saying that at the moment you're not certain as to whether or not the wells which you are presently -- these three wells or any one of the

combination of these three wells may not be adequate?

A. That word "certain" is one that I am certain based on the test data at the time the tests were made.

Q. Well, tell me what do you mean by this statement that you just -- this is your statement. What do you mean by that? I'm handing -- I'm handing the witness his statement.

MR. DICKERSON: His prepared statement.

MR. VAZZANA: His prepared statement.

A. The wells and water system when constructed terminate on lands presently owned by the applicant. No adjacent property should be affected by the wells. If, by chance -- and that's even beyond possibility in my use of the word --

Q. Sure.

A. Probability very low, some local wells in the aquifer being tapped are proven to be affected, the applicant will provide water service to the affected areas. Now, where -- where we --

Q. Where do you state that?

MR. BLASI: Page 5, top of the page.

A. Page 5. If, after the wells are completed and

tested over a longer period of time, the safe yield should be less than is now estimated, additional wells will be tested either on the present site or other land and if they should be inadequate, then plans will be developed to tap the New York City aqueduct system. Well, let's go back to page 4. Since the aquifer tested yielded 731 gallons per minute, it appears that a satisfactory water supply system can be developed for the planned development. Now, all I'm doing is putting a contingency factor in that there is that possibility that when we go beyond 60 hours the stabilization may not be at the point that we tested and only after long sustained pumping in wells can you really establish the yield, the safe yield. If you read the New York Health Manual on public water supplies they will admit to this but the word "safe yield" is a misnomer. There is no safe yield from a well.

Q. And you -- I'm sorry, continue.

A. The safe yield from a well depends upon the climatic conditions over a long period of time. You may actually mine water from an aquifer during a drought and if the aquifer is not recharged during

the wet season, then the next time you have a drought you start at a lower level than you started. You cannot do that in 60 hours. You cannot do it in 120 hours which is the norm the state uses for a sustained five-day pumping. I'm saying that it may take one, two years, to develop. What I'm saying is since the period is -- since the project is planned for development over a seven- to nine-year period more than sufficient time is available to develop the necessary data to accurately measure the safe yield of the wells being planned.

Q. What you're telling us now is that at this moment this is on an experimental basis?

A. As any well is on an experimental basis unless I happen to be drilling it out on Long Island somewhere where I've got enough background --

Q. We're talking about Heritage Hills. Long Island is another --

A. There are no wells in this area of the magnitude we are talking about.

Q. You've testified to the sewage disposal unit, have you not?

A. Yes.

Q. Is this a tertiary?

A. I smile. There is no definition of a tertiary plant.

Q. What would you call it?

A. Anything beyond a secondary plant can be classified as a tertiary plant and anything beyond a secondary plant is something that does -- provides additional removal beyond 90 to 95 percent of efficiency. In other words, if you go to biological oxidation as a secondary process, then treatment -- sewage treatment is defined up to a short period of time ago into basically two categories, ignoring the septic tank, primary and secondary. Primary is the removal of most of the suspended solids known as the settleable solids and by doing so a percentage removal of the organic load or the BOD. Efficiency of removal, BOD, order of magnitude 30 percent, suspended solids removal perhaps as high as 75 to 80 percent. That is primary treatment. To go beyond that, you not only have to remove the settleable solids but you have to remove the colloidal material as well as the soluble material which exerts a biological chemical demand on the receiving body.

The only way you can do this -- I say the only way up to some time ago was by a biological process, either a trickling filter, an intermittent sand filter or an activated sludge process. The activated sludge process is probably the most efficient of the three processes but the more difficult to operate up to a certain type of process within the activated sludge family.

The trickling filter is probably the simplest to operate along with the intermittent sand filter, so when you say tertiary, anything that goes beyond biological oxidation of the sludge is tertiary.

Now, if I follow a biological treatment plant with an intermittent sand filter theoretically, I can call it a tertiary plant but that degree of removal that I'm gaining by putting an intermittent sand filter after biological oxidation plant is very small. If I use a blanket term "tertiary," I paint picture of going well beyond. I don't go well beyond. If I go into a field of physical, chemical treatment by adsorption of the organic material onto activated carbon and get a much higher degree,

another five percent removal higher, then I'm really in a tertiary but I might even consider that to be a quaternary treatment. The term "tertiary" in my mind is one that is misused and really has no significance.

This treatment plant is an advanced waste treatment plant because we provide for the treatment through the biological phase. We go through filtration. We go through chemical precipitation and removal of phosphates and then we go on to intermittent sand filters and we go to disinfection, a seven -- seven unit processes. I don't know what term you want to call it. You want to come up with one using seven, I think I could probably apply it and it would have as much significance as tertiary.

Q. I think you've answered it sufficiently for all of us to make sense of it.

A. I don't want to sound like a college professor or high school teacher.

Q. Well, maybe some of us should go back to college. Now, you spoke about sludge, is that right; is that the word you used?

A. Sludge is an essential part of any treatment plant.

Q. What do you intend to do about the sludge?

A. It's initial sludge generated by the plant which will be the biological sludges produced in the activated process, in the activated sludge process and also the chemical precipitation sludges in the removal of the phosphorus. These will be treated, chemically treated, and dewatered on a vacuum filter. They will be used by Heritage Hills as part of their composting development for improving soil conditions, as a part of building their gardens, their lawn areas and so forth which in Westchester County the more you can get the better off you are.

Q. So what you're telling us now is that this sludge may be used as fill at the golf course?

A. Not as fill, no.

Q. No?

A. Do you play golf?

Q. I golf.

A. Do you ever see them topdress a green? Do you know what the topdressing is? Mostly leaf mold.

Q. I know what it is. Yes, I know what it is.

A. Mostly leaf mold, the sludges are in the same family. Add the sludges to the leaf mold and you've got a better leaf mold.

Q. Now, Mr. McPhee --

MR. FLORENCE: What does it do to your shoes?

THE WITNESS: What does it do to your shoes? Just think of when you pick the ball out of the cup. You buy Agronite and Orgonite, I think is still marketed. That is actually sewage sludge from the City of Milwaukee reinforced by wastes from packing houses. It's been disinfected.

Q. I believe Mr. Florence spoke about odor coming or the possibility or probability of odor coming up?

A. Probability, no. Possibility would be the word, I wouldn't put it in the realm of probability.

Q. Probability?

A. Very, very little.

Q. Did you make any study of that?

A. Odor coming from the plant? I don't anticipate it.

Q. I didn't ask you whether you anticipated it. Did you make any such studies?

A. Since I didn't anticipate it, there was no reason to make a study.

Q. Well, do you know that odor is an air pollutant under the law?

A. Certainly.

Q. You do know that?

A. I know that.

Q. You made no such studies?

A. There's no odors that would fit under the Department of Environmental Conservation levels from this treatment plant for odors. If, after we can finish with the dewatering of the sludge and using it as soil condition, we go into a total oxidation operation, then we have to file with the DEC for a process vent application to meet their requirements as far as particulate matter, certain other organic material that may be present in the lost gasses from this operation and at that time we will file and meet their requirements.

Q. Odor in and of itself is an air pollutant, isn't it true?

A. I can't answer that question. I don't really know.

MR. VAZZANA: Mr. Dickerson, do we want to go off the record or we can stay on the record. I will cite the section of the law which indicates --

MR. DICKERSON: You want me to take judicial notice?

MR. VAZZANA: Yes, take judicial notice. I don't know whether I have got the proper section.

MR. BLASI: What section are we talking about?

MR. VAZZANA: I will give it to you.

MR. DICKERSON: We will do it the short way. I'll take judicial notice of Article 19 of the Environmental Conservation Law.

MR. VAZZANA: I don't know the specific section.

Q. Now, in relation to the sewage disposal unit, did you make any study as to the oxygen demand waste.

A. The oxygen demand waste. Basically that is what we are designing for is the biochemical oxygen demand of the organic and nitrogenous or the organic material made up in carbonaceous and nitrogenous material present in the waste. Yes, that is a question? Yes,

we have.

Q. You have made studies?

A. Our design processes, the process is designed to overcome that demand.

Q. When you speak of these studies, do you have that study with you?

A. No, the study in this case was not in the sense a study by me but the use of material by other people, experts in the field who have done the work to develop these processes. You know, there is a recognition by the state that these processes accomplish what they are supposed to. In other words, when you say oxygen demand, one of the pollutants that the State of New York looks upon as far as stream pollution is the demand.

Q. That's what I mean.

A. Or oxygen in the stream which may deplete the oxygen below a certain level where fish may not --

Q. Right, that is what I am referring to.

A. All right. Now, the state says under Eastman's memorandum, Paul Eastman's memorandum that where an intermittent stream --

Q. I think it's on Point P, is that right?

A. This is for engineering firms practicing in the State of New York, Paul W. Eastman, P.E., Director-- Director of Pure Waters, "Discharge to intermittent streams" dated May 30th, 1972.

"When such discharges must be sanctioned, effluent quality must approach that of a relatively unpolluted stream. Effluent quality shall conform to the following concentrations: Dissolved oxygen, 7 milligrams per liter or greater; free ammonia as nitrogen, 2 milligrams per liter or less; BOD, which is biochemical oxygen demand, 5-day, five milligrams per liter or less; limits for concentration of other constituents consistent with the nature of the discharge may be imposed.

"Plant design should be such to achieve these effluent standards and it also must provide adequate disinfection." We have met that requirement.

Q. You have met that requirement in what respect?

A. Design of the facility.

Q. In the design of the facility which is part of the-- your report, is that correct?

A. Yes.



MR. VAZZANA: This will be a good time to break and then I will continue tomorrow.

MR. DICKERSON: Ladies and gentlemen, we reconvened this morning at a scheduled time of 10:00 a.m. However, there were some conflicts and we started a little late. I would like to reconvene tomorrow morning promptly at 10:00 a.m.

Off the record.

(Discussion off the record.)

MR. DICKERSON: At that we will go back on the record for a second. Do you have a motion, Mr. Blasi?

MR. BLASI: Off the record.

(Discussion off the record.)

MR. DICKERSON: I'll go back on the record. This hearing stands adjourned until 10:00 o'clock tomorrow morning at these quarters.

(Whereupon, at 4:48 p.m. the hearing was adjourned to reconvene on Wednesday, September 19, 1973 at 10:00 a.m.)